

APS

WINTER '97

TECHNOLOGIES®

COMPUTER SYSTEMS, DRIVES, SUPPLIES & ACCESSORIES



*APS: THE NAME TO REMEMBER
IN MAC COMPATIBLE SYSTEMS™*

Contents

3-Fan Bracket	23
Accessories Media	49
Adapter Cards	22
Apple Brand Products	42
Apple MessagePad PDA	43
APS Drive Enclosures	23
APS M540	17
APS Mini Library	13
APS PowerTools	9
APS SCSI PowerPlug	8
Attaché Cases	41
Batteries	44
Books	54-57
Bracket Kits	22
Cable Tester	26
Cables	26-27
Cameras, Digital	64-65
Carrying Cases	41
Category 5 Cabling	58
CD-R Drives	18-20
CD-R Labeling Kit	18
CD-R Mastering System	20
CD-R Media	30
CD-ROM Drives	19
Charger, Battery	44
Custom Media Racks	37
DAT Drives	13-15
DAT Media	31
DDS 3 Drive & Media	14
Design Books	54
Desks	52-53
Digital Cameras	64-65
Digital Organizer	61
DIMMs	29
Diskettes	32
DLT Autoloaders	12
DLT Drives	12
DLT Media	12
Ethernet Cards	60
EtherWave	59
Fast/Wide Drives	8-11
Fast/Wide SCSI Cables	27
Fireproof Media Storage	36
Graphic Cards	5
Grounding Wrist Strap	23
Hard Drives	
1280MB	6
2GB	6
3GB	7
4GB	7-9
9GB	10-11
Fast/Wide Drives	8-11
PowerBook Drives	7
Head Cleaners	31
"Hot Swap" Device	8
HP LaserJet 6 MP	38
IC'E Technology	6, 9
Ink Jet Cartridges, Apple	42
Internet Books	55
Jaz Drive	17
Jaz Media	30
Jennifer	27, 51, 53, 58 Back
Keyboards	51
Labels, CD	18
Label Printer	48
Laminator	48
LCD Projector	40
MacWizard	62
Media	
CD-R Media	30
DAT Media	31
Diskettes	32
DLT Media	13
Head Cleaners	31
Jaz Media	30
MO Media	30
PD Media	32
SyQuest & Compatible Media	32
Tape Media	31
Travan Media	30
Zip Media	30

Introducing the APS Pro!



Dear Friends and Valued Customers,

Happy New Year and welcome to the APS Winter Catalog. The New Year signals the introduction of a number of new products from APS, and you'll find them on the following pages. Notable among these new products, APS' own M-POWER series of Mac OS compatible computers, and our new high-performance hard disk drive enclosure, the APS Pro™. Both products were developed in response to our customer's specific needs and requests.

When we asked many of you what you wanted in a Mac compatible clone computer, we weren't shocked to hear that most of you wanted two things: great performance at a great price. What did surprise us was the number of customers who complained about the necessity of buying Mac OS computers in configurations that required them to throw away components to get the system they wanted. Apparently, the ability to select the drives and options that you need, without having to hassle with "features" that you neither need nor want is a common "need" in this market, one that the APSM-POWER series is designed to accommodate. Choose from pre-configured ready-to-ship systems, or design your own system with an astounding level of flexibility and array of options with our "Build Your Own Box" program.

It was with the demands of new high-performance drive mechanisms in mind that we developed the new APS Pro hard disk drive enclosure. This year will see spindle speeds as high as 10,000 rpm, and the 15,000 rpm level is only months behind. The stackable APS Pro enclosure is an entirely new design aimed specifically at today's high-performance 7200 rmp mechanisms, as well as tomorrow's 10,000 and 15,000 RPM drives. Drawing the best features from our award-winning SR 2000 enclosure, DaTerm and IC'E, but with cooling area, fan and power supplies designed specifically for tomorrow's high performance drive products, we're confident that the APS Pro will become the industry standard enclosure design for all hard disk drives that spin at speeds in excess of 7200 rpm.

As you explore the products and information on the pages ahead, we believe that you'll find everything you need to customize and optimize your Mac OS environment. When you find that new storage solution, accessory-or M-POWER system, or if you simply need more information, please give us a call. We're always happy to help.

Have a great 1997!

Sincerely,

Paul Mandel

President & Chief Executive Officer

Paul McGraw
Executive Vice President

6131 Deramus
PO Box 4987
Kansas City, MO
64120-0087
816-483-1600

The best products and service ... users and critics agree!



APS Pro™

Designed with the demands of new high performance drive mechanisms in mind, the new APS Pro hard disk drive enclosure delivers the extra performance that tomorrow's drives will need. The stackable APS Pro case is an entirely new design aimed specifically at today's high-performance 7200 rpm mechanism, as well as tomorrow's 10,000 and 15,000 rpm drives. Drawing the best features from our award-winning SR 2000 enclosure,

DaTerm and IC'E, the APS Pro also delivers the cooling area, a larger and quieter fan, and power supplies that are designed specifically for tomorrow's high performance drive products. We're confident that the new APS Pro will become the industry standard enclosure design for all hard disk drives that spin at speeds in excess of 7200 rpm.



APS CD-R

Double-speed recording and six-speed playback for \$499.95. The APS CD-R also uses random access to quickly locate a particular backup file. Free Toast 3.0 is included.



See page 6

APS Q 9000

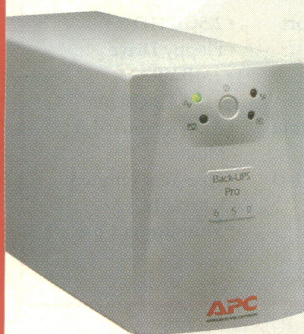
Nine Gigs for only \$1599.95 in the new APS Pro enclosure. This drive combines an Ultra SCSI interface and a 7200 spindle speed for outstanding performance.



See page 19

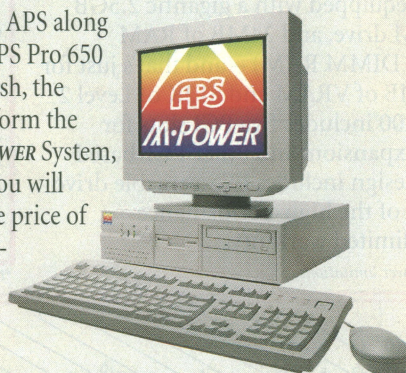
See page 10

APS M•POWER Exclusive Offer From APC, The Leader in Power Protection.



Only 1 APC unit per system.

Purchase any M•POWER System from APS along with a Back-UPS Pro 420 or Back-UPS Pro 650 and receive PowerChute for Macintosh, the software package that will safely perform the unattended shutdown of your M•POWER System, absolutely FREE. If you order now, you will also receive an additional 10% off the price of either the Back-UPS Pro 420 or Back-UPS Pro 650.



CAT. #	ITEM DESCRIPTION	REG. PRICE	PRICE
106667	POWERCHUTE (MAC)	\$79.95	FREE
106668	BACK-UPS PRO 420	239.95	LESS 10% \$215.95
106669	BACK-UPS PRO 650	299.95	LESS 10% 269.95

APC
AMERICAN POWER CONVERSION

Contents

Media Storage	34-37
Media Vaults	36
Mice	50
MicroDock Connectors	45
MO Drives	16
MO Media	30
Modems	60-61
Monitors	5
Monitor Glare Filters	49
Monitor Stands	49
M•POWER	2-4
Networking Equipment	58-59
Networking Hubs	59
Newton	43
Notebook Accessories	44-45
Office Furniture	52-53
Order Form	33
Organizer Carts	53
PaperPort	40
PCMCIA Cards	22-60
PD Media	31
Personal Scanners	39-40
Phones	63
Power Conditioners	44
PowerBook Accessories	45
PowerBook Batteries	44
PowerBook Carrying Cases	41
PowerBook Memory	28
PowerPlug	8
Printer Carts	53
Printers	38-39
QIC Drive	15
RAM	28-29
Removable Media Devices	
APS M540	17
CD-R Drives	19
CD-R Mastering System	20
CD-ROM Drives	18
Jaz Drive	17
MO Drives	16
SyQuest Drive	17
Scanners	39-40
Screen Magnifiers	49
SCSI Connectors	24-25
SCSI Cables	27
SCSI Conduit	25
SCSI Extension Cables	27
SCSI-LINK II	24
SCSI Sentry	25
SCSI Terminators	24
Security Devices	45, 48
Shredders	48
SIMMs	28-29
Slide Scanner	40
SR 1000 Enclosure Kits	23
SR 2000 Enclosure Kits	23
Software	4, 57
Sony Monitors	5
Speakers	21
Specialty Cables	26
Surge Protectors	46-47
SyQuest Compatible Media	32
SyQuest Drive	17
Tape Backup Systems	
AIT	13
DAT Drives	14-15
DLT Autoloaders	12-13
DLT Drives	12-13
QIC Drive	15
Tape Media	31
Telephone Accessories	62
Telephones	63
Travan Media	30
Ultra SCSI Adapter Cards	23
UPS Units	46
YOYO	62
Wireless Headphones	21
WWW Books	55
Zip Media	30
Voice Organizer	61

MAC HOME
Journal Award

MW ★★★★★

MACWORLD
1993
World Class
Award Winner

Best
Technical
Support
1994
Computer
Choice Awards
Best
Resistants
Computer
Network

1994
MAC HOME
JOURNAL
READER'S
CHOICE

BMUG
FALL 1994
CHOICE PRODUCT

WINDOWS
MAGAZINE
1995 WIN 100

MacWEEK

WHY YOU SHOULD BUY A MAC OS COMPUTER FROM APS

The Best Engineering – Motorola

- Motorola – manufacturer of the PowerPC processor – no one knows it better
- M•POWER takes advantage of Motorola's quality processor technology, innovation & reliability

The Best Service and Support

- M•POWER comes from the company you've known and trusted for years
- M•POWER has the backing of APS' award-winning service and support

Exceptional Value

- Best mix of advanced processor technology and high-quality hardware
- Compared with other personal computers running Mac OS, APS' M•POWER gives you the most for your money

Most Configuration Options

- APS, the recognized leader in Mac data storage solutions, has the hardware that you want included with your next Mac OS system – hard drives, removable media devices, and tape backup systems

Build It Your Way!

- Get all of the hardware you want, and have it custom assembled by APS' knowledgeable technicians



APS is now bundling Nisus® Writer 4.1 at no extra charge with all of its formatted hard drives and M•POWER Systems.

APS M•POWER 604e200™

- High-performance mini-tower PowerPC system at an exceptional price
- Blazing fast 200MHz PowerPC 604e processor
- Five PCI slots and five available drive bays
- 2.5GB hard drive
- 10X CD-ROM
- 24MB of RAM

Blinding speed and exceptional value set this high-performance PowerPC, Mac OS workstation firmly at the top of the heap. The APS M•POWER 604e200 comes equipped with a gigantic 2.5GB hard disk drive, a 10X CD-ROM drive, and 24MB of RAM (upgradable to 160MB of EDO DIMM RAM) – and that's just for starters! Turbocharged with 2MB of VRAM and 512K of Level 2 cache, the APS M•POWER 604e200 includes five PCI slots for video, networking, peripheral expansion, and other PCI-based cards. The roomy mini-tower design includes five available drive bays for optimal customization of the high-performance M•POWER 604e200.* One-year limited warranty.

*Filling all available drive bays may exceed power limitations.

\$2599

604e200

- 3-5.25" Half Height Internal Bays
- 5-3.5" Low Profile Internal Bays
- 5-PCI Expansion Slots
- 16-bit Sound Output Port
- Rear Headphone Jack
- Microphone Jack
- 10X CD-ROM
- 24MB RAM
- 2.5GB HD
- Floppy Drive
- 2MB VRAM
- 512K L2 Cache
- ADB Keyboard & Mouse
- One-Year Limited Warranty
- Mini-Tower Case

*Monitors are not included.

COMPARISON

COMPARISON		5.25" Intl. Bays	3.5" Intl. Bays	PCI Expansion Slots	Printer Port	Modem Port	ADB Port	ADB Keyboard	ADB Mouse	PS/2 Port	SVGA Monitor Port	Supports 14", 15", 17" & 21"	SCSI Bus	IDE Bus	16-bit Sound Output Port	Rear Headphone Jack	Microphone Jack	CD ROM	Hard Drive (GB)	RAM	L2 Cache	VRAM (MB)	Floppy Drive	Price
APS 604e200	Tower System	3	5	5	✓	✓	✓	✓	✓	✓	✓	1	✓	✓	✓	✓	10X	2.5	24	512K	2	✓	\$2599	
PowerTower 200e	Tower System	3	2	3	✓	✓	✓	✓	✓	-	✓	1	-	✓	✓	✓	8X	2	16	1MB	2	✓	\$3595	
PowerMac 9500/200	Tower System	1	3	6	✓	✓	✓	-	✓	-	✓	2	-	✓	✓	✓	8X	2	32	256K	2	✓	\$4199	

APS M-POWER 603e160™ \$1399

- The best value in PowerPC computing!
- 160MHz Motorola PowerPC 603e processor
- 16MB of RAM
- Three available PCI slots and one available 3.5" drive bay
- 1.2GB hard drive
- 10X CD-ROM

The new benchmark in PowerPC, Mac OS computing, the APS M-POWER 603e160, for under \$1,400, is the value leader in RISC-based workstations. The perfect home, or mass application PowerPC computer includes a 1.2GB hard disk drive, a 10X CD-ROM, and 16MB (upgradable to 160MB) of RAM. The APS M-POWER 603e160 includes a mouse, ADB keyboard, three PCI expansion slots, and one available 3.5" low profile drive bay.* One-year limited warranty.

603e160

- 2-5.25" Half Height Internal Bays
- 2-3.5" Low Profile Internal Bays
- 3-PCI Expansion Slots

INTERFACES

- Printer Port
- Modem Port
- ADB Port
- SCSI Port

- SVGA Monitor Port
- Supports 14", 15", 17" & 21" Monitors
- 2-PS/2 Ports
- IDE Bus
- 16-bit Sound Output Port
- Rear Headphone Jack
- Microphone Jack

INCLUDES:

- 10X CD-ROM
- 16MB RAM
- 1.2GB HD
- Floppy Drive
- 1MB VRAM
- ADB Keyboard & Mouse
- One-Year Limited Warranty



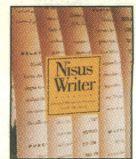
Monitors are not included.

*Filling all available drive bays may exceed power limitations.

APS M-POWER 603e200™

- The ideal mix of performance and value
- 200MHz Motorola PowerPC 603e processor
- 16MB of RAM
- Three available PCI slots and one available 3.5" drive bay
- 1.2GB hard drive
- 10X CD-ROM

Outstanding performance at a terrific price, the APS M-POWER 603e200 is the bang-for-the-buck system of choice for individual and institutional users alike. Powered by Motorola's 200MHz PowerPC 603e processor, the APS M-POWER 603e200 comes ready for action with a 1.2GB hard drive and a 10X CD-ROM. Run most applications in the installed 16MB of system RAM (upgradable to 160MB) and enjoy the exceptional performance afforded by the 256KB of Level 2 cache and 1MB of VRAM. Three PCI slots and one available 3.5" low profile drive bay lets you add a whole range of PCI card and peripheral options.* With the included mouse and extended ADB keyboard, this is the value-priced performance system of choice. One-year limited warranty.



APS is now bundling Nisus® Writer 4.1 at no extra charge with all of its formatted hard drives and M-POWER Systems.

603e200

- 2-5.25" Half Height Internal Bays
- 2-3.5" Low Profile Internal Bays
- 3-PCI Expansion Slots

INTERFACES

- Printer Port
- Modem Port
- ADB Port
- Supports 14", 15", 17" & 21" Monitors

- SVGA Monitor Port
- SCSI Port
- 2-PS/2 Ports
- IDE Bus
- 16-bit Sound Output Port
- Rear Headphone Jack
- Microphone Jack

INCLUDES:

- 10X CD-ROM
- 16MB RAM

- 1.2GB HD
- Floppy Drive
- 1MB VRAM
- 256K L2 Cache
- ADB Keyboard & Mouse
- One-Year Limited Warranty

\$1599

Monitors are not included.

*Filling all available drive bays may exceed power limitations.

Don't see a custom that fits your needs? Build It Your Way! Turn to Page 4

BUILD YOUR OWN BOX™

Build Your Own Box...It's so easy with APS to configure your system based exactly on your individual, company or institution's needs. From a home system with extra RAM to handle games and surf the Web, to an accelerated graphic design production system, you can design it in minutes with this simple chart. Select your:

1. M•POWER System from section A**
2. Additional CD-ROM options section B†
3. Additional drive options section C
4. Monitor from section D
5. Memory from section E**
6. Ethernet PCI Cards from section F
7. Graphic card from section G
8. External modem from section H

Copy the price in the tally column, add it up and call one of our System Experts at 800-862-6805 to place your order. Need a little assistance? Have a question or two about drive specs or how much RAM to buy to run Photoshop or Quark? Call! We're an 800 number away.

** RAM and a CD-ROM drive are not included in Basic Systems. You must purchase CD-ROM or CD-R drive, a minimum of 16MB of RAM and either a minimum of 1MB VRAM or a graphics card.

PRODUCT	PRICE	PAGE	TALLY	PRODUCT	PRICE	PAGE	TALLY	PRODUCT	PRICE	PAGE	TALLY
A. BASIC SYSTEMS				1.2GB HD (IDE)	199.95	*	_____	VRAM 2MB	189.95	4	_____
603e160†	\$999.00	3	_____	2.5GB HD (IDE)	299.95	*	_____	VRAM 4MB	329.95	4	_____
603e200†	1,199.00	3	_____	3GB HD (IDE)	399.95	8*	_____	256K L2 Cache	\$89.95	4	_____
604e200†	1,599.00	2	_____	1.2GB HD (SCSI)	249.95	6	_____	512K L2 Cache	149.95	4	_____
B. CD-ROM OPTIONS (internal)				2.1GB HD (SCSI)	349.95	6	_____	F. FARALLON ETHERNET PCI CARDS			
10X CD-ROM (IDE)	\$99.95	*	_____	3.2GB HD (SCSI)	499.95	6	_____	10Base-T ††	\$79.95	*	_____
12X CD-ROM (SCSI)	179.95	18	_____	4.3GB HD (7200 rpm SCSI)	899.95	9	_____	10/100Base-T ††	199.95	*	_____
2X6 CD-R (SCSI)	449.95	19	_____	9GB HD (7200 rpm SCSI)	1,499.95	10	_____	G. GRAPHICS CARDS			
4x4 CD-R (SCSI)	899.95	19	_____	D. MONITORS				4MB IMS Twin Turbo 128M ††	\$395.95	*	_____
C. DRIVE OPTIONS (internal)				Techmedia 15" Monitor	\$299.95	5	_____	8MB MGA Millennium	499.95	5	_____
8X 4 Disc CD Changer (SCSI)	399.95	18	_____	Techmedia 17" Monitor	599.95	5	_____	H. EXTERNAL MODEMS			
2.6GB MO (SCSI)	1,699.95	16	_____	Techmedia 20" Monitor	1,299.95	5	_____	Teleport Platinum	\$189.95	60	_____
HyperQIC™ (SCSI)	349.95	15	_____	Sony 17" Monitor	799.95	5	_____	Sportster 28.8	179.95	61	_____
HyperDAT™ (SCSI)	849.95	15	_____	Sony 20" Monitor	1,699.95	5	_____	MacClass MiniTower II	149.95	61	_____
HyperDAT™ Pro (SCSI)	949.95	14	_____	E. MEMORY (prices subject to change)				APS Online Starter Kit ††	149.95	4	_____
HyperDAT III (SCSI)	1249.95	14	_____	DRAM 8MB	\$89.95	4	_____	Includes Supra 33.6 modem and Apple Internet Connection Kit software.			
Jaz (SCSI)	399.95	17	_____	DRAM 16MB	170.95	4	_____	TOTAL			
Nomai MCD 540 (SCSI)	249.95	17	_____	DRAM 32MB	324.95	4	_____	†† Only available with system purchase			
230MB MO (SCSI)	299.95	16	_____	DRAM 64MB	628.95	4	_____	*Please ask your sales rep.			
640MB MO (SCSI)	549.95	16	_____	VRAM 1MB	86.95	4	_____				

† Minimal configuration includes listed Motherboard, standard enclosure, floppy drive, ADB keyboard and an ADB mouse. System must ship with a CD-ROM or CD-R drive and a minimum of 16MB of RAM and either a minimum of 1MB VRAM or a graphics card.



APS M•POWER Exclusive Power Protection from APC.*

Purchase any M•POWER System from APS along with a Back-UPS Pro 420 or Back-UPS Pro 650 and receive PowerChute for the Macintosh, the software package that will safely perform the unattended shutdown of your M•POWER system, absolutely FREE! If you order now, you will also receive an additional 10% off the price of either the Back-UPS Pro 420 or Back-UPS

Pro 650. Only 1 APC unit per system.

CAT. #	ITEM DESCRIPTION	REG. PRICE		PRICE
106667	POWERCHUTE (MAC)	\$79.95		FREE
106668	BACK-UPS PRO 420	239.95	LESS 10%	215.95
106669	BACK-UPS PRO 650	299.95	LESS 10%	269.95

* Must be purchased with an M•POWER system.

APS Online Starter Kit*

- Includes a 33,600 bps modem and Apple Internet Connection Kit software

For a terrific, low price, the APS Online Starter Kit provides the hardware and software needed to go online with your new M•POWER system. The APS Online Starter Kit comes with a high-speed, Supra 33.6 modem from Diamond Multimedia as well as Diamond's data software and its acclaimed FAXcilitate™ fax software. The kit comes with the Apple Internet Connection Kit which delivers the software you'll need for quick Internet access, including Apple Internet Dialer, Netscape Navigator, Claris Emailer Lite, Dartmouth Fetch, Newswatcher, QuickTime VR Player, RealAudio Player, Aladdin Stuffit Expander, Adobe Acrobat Reader and more!



106790	APS ONLINE STARTER KIT*	\$149.95
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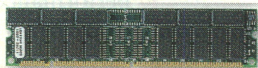
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Memory Upgrades*

(M•POWER System require a minimum of 16MB of DIMMs and 1MB of VRAM or a graphics card.)

(M•POWER CPUs have three EDO DIMM slots where you may install DIMMs one at a time. Slots 2 and 3 can accept up to 64MB DIMMs, and slot 1 can accept up to a 32MB DIMM for a maximum of 160MB of RAM in any M•POWER CPU.)

EDO DIMMS		
8MB EDO DIMMS	1024-080-008	\$89.95
16MB EDO DIMMS	1024-080-016	170.95
32MB EDO DIMMS	1024-080-032	324.95
64MB EDO DIMMS	1024-080-064	628.95



VRAM EDO DIMMS		
1MB VRAM DIMMS	1024-082-001	\$86.95
2MB VRAM DIMMS	1024-082-002	189.95
4MB VRAM DIMMS	1024-082-004	329.95

LEVEL 2 CACHE DIMMS		
256KB L2 CACHE	1024-084-256	\$89.95
512KB L2 CACHE	1024-084-512	149.95

*Memory prices are extremely volatile, changing as often as several times each day. Please call for current pricing.

No credits or refunds on RAM purchases. Defective RAM will be replaced with like capacity RAM after defects have been verified by APS. RMA required.

See Your Work in Brilliant, Clear Color

Techmedia Color Monitors

Model TCM-1500N

Bring your work to life with the Techmedia TCM-1500N Color Monitor. Its 15" display and 13.7" viewable image area provide plenty of room to see your projects. The Techmedia TCM-1500N features .28mm dot pitch and supports Mac resolutions of up to 1024 x 768 @ 75Hz and its digital controls make it easy to adjust all of its settings. It has a manufacturer's 3-year limited warranty.

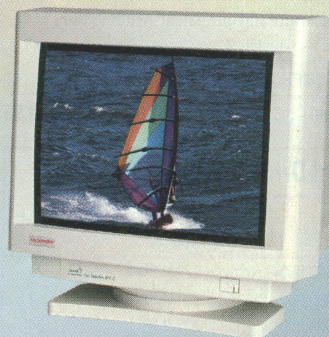
106724 TCM-1500G \$299.95



Model TCM-1700G

See your work in sharp, vivid color on the Techmedia TCM-1700G Color Monitor. It has a 17" display with a 15.9" viewable image area and supports Mac resolutions of up to 1152 x 870 @ 75Hz. It features an Invar shadow mask and a sharp .28mm dot pitch. A non-glare coating on the screen improves viewability by reducing glare. It has a manufacturer's 3-year limited warranty.

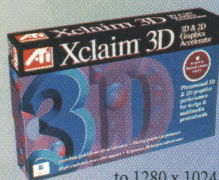
106725 TCM-1700G \$599.95



Model TCM-2000G

The Techmedia TCM-2000G Color Monitor delivers a sharp resolution and excellent viewability. Its 20" display with a 18.75" viewable image area supports Mac resolutions of up to 1280 x 1024 @ 75Hz. The Techmedia TCM-2000G displays superb, sharp colors with a F.S.T. double focus gun and Invar shadow mask. A non-glare coating on the monitor helps to minimize glare and allow you to see the screen clearly. It has a manufacturer's 3-year limited warranty.

106726 TCM-2000G \$1,299.95



Xclaim 3D Graphics Accelerator Card

Add 3D elements to any design or multimedia project with the Xclaim 3D Graphics Accelerator Card. The Xclaim 3D Graphics Accelerator Card supports true color graphics at a resolution of up to 1280 x 1024 and allows you to render 3D worlds and animations in real-time without waiting. The card supports QuickDraw 3D RAVE and delivers 3D speeds up to 6x faster than a Power Mac 9500 using QuickDraw 3D.

CAT. #	ITEM DESCRIPTION	PRICE
106634	XCLAIM 3D GRAPHICS ACCELERATOR 4MB	\$329.95
106635	XCLAIM 3D GRAPHICS ACCELERATOR 8MB	449.95

Xclaim TV External TV Tuner* Card

Bring broadcast TV to your Mac with the Xclaim TV External TV Tuner. Xclaim TV can tune in standard TV signals – or from cable, a satellite dish or an external antenna. Its built-in blocking feature allows you to restrict access to undesirable channels so that your kids don't see something they shouldn't. A favorite channel feature allows you to monitor several channels at once and a zoom feature allows you to get close-ups of the action. The Xclaim TV can also decode the closed caption text sent by many stations and its Hot Words feature notifies you when selected words appear in the closed caption text.



106633	XCLAIM TV EXTERNAL TV TUNER	\$89.95
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*Requires Xclaim VR

Sony Multiscan 20sfl Trinitron Graphic Display

The Sony Multiscan 20sfl Trinitron display provides exceptional resolutions and viewability. The large 20" display has a 19.1" viewable image size and supports resolutions up to 1600 x 1200 @ 60Hz. It also incorporates a vertically flat CRT and a bonded anti-reflective panel which improve viewability by minimizing glare.

106379 SONY MULTISCAN 20SFL \$1,699.95



Sony Multiscan 17sfl Trinitron Graphic Display

View bright images and vibrant colors on this 17" Sony Multiscan 17sfl Trinitron display. The monitor has a 16" viewable image size and supports resolutions up to 1280 x 1024 @ 60Hz using Sony's Digital Multiscan technology. The Sony Multiscan 17sfl uses a vertically flat CRT.

106378 SONY MULTISCAN 17SFL \$799.95



Matrox MGA Millennium Graphics Accelerator Card

Bring ultra-fast graphics acceleration to a PCI-based Power Macintosh or M-Power system with the 8MB MGA

Millennium Graphics Accelerator Card. The MGA Millennium delivers 64-bit graphics acceleration, making it ideal to accelerate true color publishing, business, 3D and multimedia applications. The MGA Millennium supports resolutions up to 1440 x 1080 in 16.7 million colors and up to 1600 x 1200 in 32,000 colors.

106745 MATROX MGA MILLENNIUM GRAPHICS ACCELERATOR CARD 8MB \$499.95

Xclaim VR 3D Gaming and Multimedia Solution Card

Add video-in and video-out capabilities and high resolution graphics to your Mac. The Xclaim VR 3D allows you to video-tape presentations and provides for flicker-free display of QuickTime movies or other Mac based multimedia presentations on a TV. Use the built-in capture engine to grab still images from a VCR, TV or laserdisc player. The Xclaim VR 3D delivers QuickDraw 3D RAVE acceleration and supports resolutions of up to 1152 x 870.

106632 XCLAIM VR 3D GAMING AND MULTIMEDIA SOLUTION 4MB \$299.95



Xclaim GA Graphics Accelerator Card

Instantly change resolution and color depth on the fly with the new Xclaim GA Graphics Accelerator Card. The Xclaim GA delivers true color graphics for design and publishing professionals at speeds up to 8x faster than unaccelerated graphics. With 4MB of memory, it provides graphics resolutions of up to 1152 x 870.

106636 XCLAIM GA GRAPHICS ACCELERATOR CARD \$329.95

Monitor images are simulated. Products on this page are not covered by the APS 30-day money-back guarantee. Product covered by manufacturer's warranty

APS Hard Drives

IC²E: Thermal Stability Really Counts

by Steven Bobker

Have you noticed that the hard drives we're seeing today have much better performance than older drives? It's clear they're much faster. One of the most common ways to increase performance speed is to spin the actual disk platters faster. The top speed of the today's fastest drives is more than double the top speed of very fast drives of only two years ago.

With the new high speeds comes a lot more heat. Some drives vent better, and some generate less heat, but all run relatively hot, both physically and in performance.

Heat is the deadliest enemy of fine electronics. Destroying boards is often called frying the board, and the term is literal, not figurative. Even if the maximums are never violated, wide swings in operating temperature can shorten drive life span.

The solution is to insert your drive in a thermally stable environment that isn't too hot. That sounds easy, but it's actually difficult. Computer and drive cases usually have fans, but many are afterthoughts stuck far from the drives. If they run continuously they can be noisy, and since they're cheap (relatively) mechanical items, the longer they run, the sooner they fail. They can suck dust and other junk into your hardware constantly.

The IC²E system is the solution. Basically it's an on-demand fan cooling system. You get what you need, only for as long as you need. It's simple in concept, and it works.

I tested an IC²E-equipped drive with some medieval instruments, a powerful hair dryer being foremost. I cooled the drive (with an ice bag) and then applied maximum heat. No matter what I did, the drive performed flawlessly. IC²E kicked in and kept everything smooth. Repeated runs using MacBench 3.0 showed flat line results which is what we want. Similar tests using a non-IC²E drive showed that as heat varied so did performance.

What that all means is an IC²E-equipped drive should last much longer, and provide consistently stable performance. You can't ask for more.

I wouldn't buy a high-performance drive without DaTerm or IC²E. IC²E can even be added to old drives. Very cool (sorry, I couldn't resist).



6

800-374-5681
24 Hours a Day, 7 Days a Week



Desktop Hard Drives

APS Q 1280

Quantum[®]

- High-performance Ultra SCSI interface
- Dependable Quantum Fireball TM mechanism



Providing superior performance from its Ultra SCSI interface, the APS Q 1280 is an excellent choice in any demanding desktop storage environment. Its sustained reads of up to 3.90MB per second and writes of up to 3.80MB per second make the APS Q 1280 well suited to handle anything from spreadsheets and text files to page layout and graphic design chores. Its impressive performance is aided by the use of MR heads and an advanced PRML read channel. The reliable APS Q 1280 packs its 1223MB onto a 4500 rpm, 3.5" low profile mechanism and is backed by a three-year limited warranty. The APS Q 1280 is also available internally in a Fast ATA-2 interface. The external drive has the benefits of our award winning SR 2000 enclosure and our patent-pending IC²E technology.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000
2154-001	APS Q 1280 - SCSI	\$249.95	\$299.95

Drive Specifications for Desktop & Mid-Capacity Hard Drives

Drive	Avg. Seek Time	Trans. Rate Sust. Read	Trans. Rate Sust. Write	Warranty Years	MTBF	Formatted Capacity	Intl. Price Per MB
APS Q 1280	9.4 ms	3.90MB/S	3.80MB/S	3	400,000	1223MB	.20
APS Q 2100	8.2 ms	4.42MB/S	3.88MB/S	3	400,000	2014MB	.17
APS WD 2000	7.6 ms	5.00MB/S	5.48MB/S	5	1,000,000	2077MB	.34
APS Q 3200	7.1 ms	4.47MB/S	4.00MB/S	3	400,000	*3067MB	.16
APS WD 2000W	7.6 ms	6.88MB/S	9.22MB/S	5	1,000,000	2077MB	.39

The blue bar indicates the SCSI drive with the best cost per MB and the gold bar indicates the SCSI drive with the best transfer rates in this group.

*Formatted in multiple partitions.

All drives are tested on a Power Mac 9500/130.

Specifications subject to change without notice.

APS WD 2000

WESTERN DIGITAL

- New from APS and Western Digital
- Fast 7200 rpm Ultra SCSI hard drive



The combination of its competitive price and terrific performance makes the APS WD 2000 an excellent choice for audio-video, workstation, server and multi-user applications.

Based on the new Western Digital Enterprise SCSI drive mechanism, the drive features a formatted capacity of 2.1GB and uses the SCSI-3 interface. The APS WD 2000 features an embedded servo, making the drive a terrific choice for multimedia work. The drive delivers an average seek time of 7.6 ms with sustained reads at up to 6.88MB per second and sustained writes at up to 9.22MB per second on an Ultra Wide SCSI Bus. The drive is rated at 1,000,000 hours MTBF and is backed by a 5-year limited warranty and ships in our SR 2000 external case.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000
2157-002	APS WD 2000	\$649.95	\$699.95
2175-002	APS WD 2000W	749.95	799.95

adaptec

Optimize Your Ultra SCSI Drives Performance

See Page **22** for Ultra Wide cards

APS Q 2100

Quantum[®]

- Low acoustic noise and high reliability
- Uses MR heads and a PRML read channel
- Ultra SCSI Interface works in Ultra SCSI Standard SCSI II



As the storage demands of your applications and files continue to grow, consider the APS Q 2100 to handle your mounting storage needs. This 4500 rpm drive uses MR heads and an advanced PRML read channel to pack more than 2GB into a 3.5" low profile Ultra SCSI drive, giving you the extra storage space your computer needs. The drive delivers great performance too, making it a good fit with almost any application. The APS Q 2100 is rated at 400,000 hours MTBF and is backed by a three-year limited warranty. The external drive has all the benefits of our award winning SR 2000 enclosure and our patent-pending IC²E technology.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000
2154-002	APS Q 2100 - SCSI	\$349.95	\$399.95

APS Q 3200

Quantum[®]

- New 3GB capacity is a great value
- Low acoustic noise



Priced lower than many 2GB drives, the new APS Q 3200 is an exceptional hard drive value. MR heads and PRML read channel technology increase the drive's areal density, allowing the APS Q 3200 to store up to 3067MB on a 3.5" low profile drive while maintaining a low acoustic noise level. This 4500 rpm drive also uses an Ultra SCSI interface to improve drive performance and reliability. The APS Q 3200 is capable of sustained data transfer rates of up to 4.47MB per second, making it a good storage solution for a wide variety of applications. The drive is rated at 400,000 hours MTBF, and has a three-year limited warranty. The external drive is enclosed in our award-winning SR 2000 enclosure that has our new patent-pending IC²E Technology.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000
2154-003	APS Q 3200	\$499.95	\$549.95

High Performance IDE Hard Drives

APS IDE Drives

APS I 2.1

- Adaptive Battery Life Extender™ Technology
- Perfect upgrade drive for all IDE PowerBook and Duo users

The APS I 2.1 blends speed and durability, making it ideal for notebook computing applications which require fast access to large amounts of data, such as integrated fax, graphics, Internet and multimedia. Using MR heads and a digital PRML channel to increase areal density and No-ID™ sector formatting, the 4900 rpm APS I 2.1 delivers 2.1GB of storage space. To save battery power, the drive uses Adaptive Battery Life Extender technology which reduces drive power consumption by up to 16% through the use of two idle modes – Performance Idle and Low Power Idle. The drive is designed to withstand 100 G's of operating shock and 300 G's of non-operating shock and is backed by a 1-year manufacturer's limited warranty.

AT. #	ITEM DESCRIPTION	INTERNAL
135-002	APS I 2.1	\$599.95

APS WD 3000

- Low power consumption
- Dependable Western Digital Caviar™ mechanism

The APS WD 3000 is a high-performance drive designed to meet the requirements of today's powerful PowerPC and RISC-based computers. The 5200 rpm APS WD 3000 gives you 3GB of formatted storage space. This Enhanced IDE drive delivers sustained reads of up to 4.8MB per second and sustained writes of 4.7MB per second. The drive supports high-speed host transfers, enabling maximum disk performance under local bus environments. The APS WD 3000 is rated at 300,000 hours MTBF and comes with a 3-year manufacturer limited warranty.

AT. #	ITEM DESCRIPTION	INTERNAL
168-003	APS WD 3000	\$399.95

Drive Specifications for IDE Hard Drives

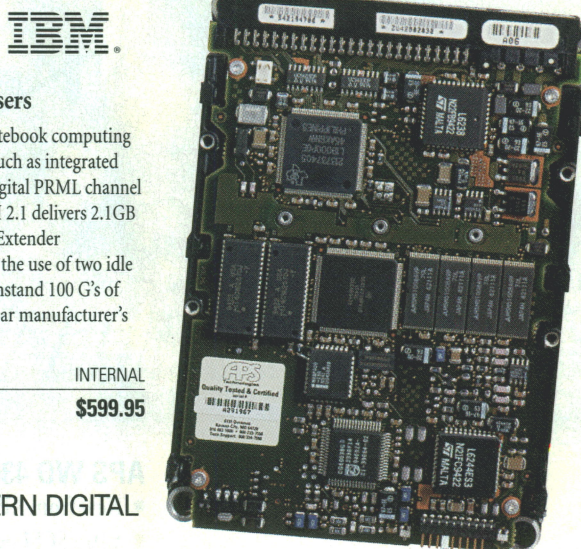
Drive	Avg. Seek Time	Trans. Rate Sust. Read	Trans. Rate Sust. Write	Warranty Years	MTBF	Formatted Capacity	Intl. Price Per MB
APS I 2.1	N/A	2.38MB/S	2.55MB/S	1	N/A	2067MB	.29
APS WD 3000	N/A	4.8MB/S	4.71MB/S	3	300,000	3020MB	.13
APS I 4000	9.5 ms	4.00MB/S	5.10MB/S	3	N/A	4330MB	.17

The blue bar indicates the SCSI drive with the best cost per MB and the gold bar indicates the IDE drive with the best transfer rates in this group.

Formatted in multiple partitions.

Drives are tested on a Power Mac 9500/150.

Specifications subject to change without notice.



APS I 4000

- Terrific value
- High performance Fast ATA3 hard drive

Providing the large 4GB capacity that's needed for many audio/video and multimedia projects, the APS I 4000 is a superb drive for today's data intensive applications such as high-quality audio/video storage and large databases. The drive operates at 5400 RPM takes advantage of MR heads and a PRML digital channel to increase areal density. The drive also offers IBM's own No-ID sector formatting to eliminate the space taken by duplicate storage of each data sector's ID field. Using its Fast ATA-3 interface, the drive is capable of sustained data transfer rates of 5.1MB per second with an average seek time of 9.5 ms. The internal APS I 4000 comes with a 3-year manufacturer limited warranty.

CAT. #	ITEM DESCRIPTION	INTERNAL
2161-004	APS I 4000	\$699.95

Glossary

Access Time: the amount of time (usually in milliseconds), that it takes a drive (hard drive, tape drive, CD-ROM drive, etc.) to make the requested information available to the computer. It includes (depending on drive type) actual seek time, rotational latency, head settle time, rewind or fast-forward time, and command processing overhead time. Access time is CPU independent, meaning that it is the same regardless of the speed of the attached CPU.

Address, Block Address: the unique address given to each block of data on the drive partition. Each one must be unique, and each is used to contact a specific location. The computer uses the block address to keep track of all data.

Operating systems can only address a set number of blocks per partition, determining the allocation block size.

Allocation Block Size: the size of the smallest addressable data block on the drive. Because each partition has a limited number of block addresses, the total storage space can only be split up into that many data blocks. A partition with, for example, one billion bytes of storage, can have at most one million block addresses. Each block will then be one thousand bytes. Even if a file takes up only 3 bytes, it requires 1000 bytes on the drive, because two pieces of data cannot share a block address. If a file is 1001 bytes, it will take up two blocks (2000 bytes) because the one byte that won't fit in the first block must have a block of its own. Because each partition has its own block addressing table, partitioning the drive into several smaller partitions will increase the total number of available block addresses, making each individual block smaller. This can significantly increase the usable storage space on a drive.

Asynchronous, -ly: a mode of SCSI operation where each byte is requested, sent, and acknowledged before the next is requested, sent, etc. See Synchronous. Also, system commands in the Macintosh, such as a format, which take place in the background without tying up the CPU.

ATA see IDE

(Continued on page 11)

Three outlets offer instantaneous battery backup. Three more outlets provide surge and spike protection!

Back-UPS® Office™

- UPS and surge protection in one unit
- Single-device protection helps prevent harmful line noise

Protect new drives and your computer workstation by combining a UPS and surge protector into a single, compact unit. The new Back-UPS Office applies premium power protection through six outlets, three of which provide instantaneous battery backup. The remaining three deliver surge and spike protection only. Two of the outlets are spaced to accommodate large transformer block plugs. The unit also includes a protected RJ11/45 receptacle.

Use Back-UPS Office's three battery backup outlets for your CPU, monitor, and storage drive to let you safely shut down in the event of a blackout. Attach any remaining peripherals to the three surge protected outlets, and connect a phone or data line through Back-UPS Office to completely safeguard your system.

The battery which powers the UPS portion of the Back-UPS Office is user-replaceable, lasting three to six years under normal usage. It has enough power to keep a Macintosh Performa CPU and a 15" monitor running for seven to 13 minutes. The Back-UPS Office is backed by a two-year warranty and carries American Power Conversion's \$25,000 connected equipment policy.



APS Hard Drives

APS ST 4300

- 7200 rpm Ultra SCSI drive
- 512K RAM buffer

3 YEAR MONEY BACK GUARANTEE Advanced technologies in the APS ST 4300 deliver the high capacity, fast data transfer rates and uninterrupted flow of data required for professional audio/video, high-resolution graphics and imaging applications. This 4.35GB 7200 rpm Ultra SCSI drive utilizes Seagate's ASAT technology to dramatically increase drive performance by streamlining the internal architecture. The APS ST 4300 also uses a programmable multi-segmented buffer that enables dramatic throughput in multiuser and multitasking environments. This 512K RAM buffer can be divided into as many as 16 equal segments for independent read and write data caching. The drive is rated at 1,000,000 hours MTBF and includes a 5-year manufacturer's limited warranty. Available in either our SR 2000 or our new APS Pro enclosure.

CAT. #	ITEM DESCRIPTION	SR 2000	APS PRO
2138-004	APS ST 4300	\$1,199.95	\$1,249.95
2139-004	APS ST 4300W	1,299.95	1,349.95



APS WD 4300

- New from APS and Western Digital
- Ultra SCSI performance and 7200 rpm are ideal for intensive AV use

3 YEAR MONEY BACK GUARANTEE Combining competitive price and outstanding performance, the APS WD 4300 is an excellent choice for audio-video, workstation, server and multiuser applications. The drive features a formatted capacity of 4.3GB and uses the SCSI-3 interface. The APS WD 4300 features command queuing with seek and latency optimization for multi-threaded workloads and an embedded servo to maintain an uninterrupted data stream. The drive delivers an average seek time of 4.7 ms with sustained reads at up to 6.88MB per second and sustained writes at up to 9.22MB per second. The drive is rated at 1,000,000 hours MTBF and is backed by a 5-year manufacturer's limited warranty and ships externally in our SR 2000 or new APS Pro enclosure.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000	APS PRO
2157-004	APS WD 4300	\$1,049.95	\$1,099.95	\$1,149.95
2175-004	APS WD 4300W	1,149.95	1,199.95	1,249.95



Quickly and safely "hot swap" SCSI peripherals

APS SCSI PowerPlug

- Great for graphic designers, service bureaus, network administrators
- Included control panel automates swapping procedure
- Available terminated (II) or unterminated (NT)

Adding, removing, or swapping SCSI devices in a chain has never been quicker or easier. Using the APS SCSI PowerPlug, you can safely "hot swap" SCSI devices on your Mac. Hot swapping is the process of adding or removing SCSI peripherals without first having to power down the Mac and all of the attached peripherals. The APS SCSI PowerPlug is a must for graphic designers, network administrators, service bureaus, multimedia developer, and anyone else who frequently needs to add or remove SCSI peripherals.

The time savings of hot swapping are immense. Using the APS SCSI PowerPlug and the included software control panel, users can add or remove a device in as little as 30 seconds compared to as much as 10 minutes or more to power down, connect or remove a device, and power back up. The APS SCSI PowerPlug comes in two versions. The APS SCSI PowerPlug II lets you swap devices at the end of the chain and includes Digital Active Termination. The unterminated APS SCSI PowerPlug NT includes a SCSI splitter device and is used in the middle of the chain. You can use as many as two APS SCSI PowerPlug NTs in a chain as long as the chain is properly terminated by an APS SCSI PowerPlug II, an APS SCSI Sentry, a DA-Term-equipped APS drive, or a passive terminator. Both APS SCSI PowerPlugs use standard 50-pin Centronics connectors and come with a rubber cap to protect the open end.

Using the APS SCSI PowerPlug is easy. First, go to the included control panel, click on the SCSI ID you want to hot swap, and choose: Add Device, Remove Device, or Swap Device by clicking the appropriate button. From there, the control panel guides you through the hot swap process. It will tell you where to position the switch that's marked Data Stop and Data Go, and when it's safe to add, remove, or swap.

Please note: The hot swap process detailed in the control panel must be followed exactly. Failure to follow the instructions may result in system crashes, data corruption, or electrical circuitry damages.

CAT. #	ITEM DESCRIPTION	PRICE
106448	APS SCSI POWERPLUG II (TERMINATED)	\$99.95
106449	APS SCSI POWERPLUG NT (NOT TERMINATED)	79.95



APS SCSI PowerPlug Uses:

Network Administrator: Add additional hard disks or remove damaged disks without shutting down the server

Graphic Designer: Collect for output to a hard disk and take the drive to a service bureau without needing to shut down

Service Bureau: Connect client drives while other jobs are processing

PowerBook User: Attach a PowerBook in docking mode without shutting down the desktop Mac

University Computer Room: Accept student drives without shutting down

Small Office: Quickly and easily share SCSI peripherals among Mac users

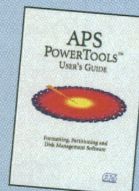
APS 4GB drives are perfect for database servers, desktop publishing and workstations, video servers and editing systems, web servers and RAID.

APS Hard Drives



A radical concept in enclosure climate control, APS' exclusive IC²E system uses digital technology to sense heat build-up around the drive mechanism. Applying that information, IC²E controls a high performance, super-efficient ball bearing fan subsystem to maintain mechanism temperature comfortably within the manufacturer's specified operating range. Should the mechanism exceed the specified operating temperature range, the intelligent IC²E circuitry provides a clear indication that a thermal problem exists.

When you first power up your new device, the fan may not immediately spin. The IC²E design senses the change in internal operating temperature and initiates fan operation as appropriate. IC²E increases fan speed as the drive demands more cooling power, and decreases it as the cooling demands diminish. If, for any reason, your drive heat should escalate beyond the operational temperature range, your power LED will flash repeatedly from green to orange.



APS PowerTools 4.09

APS PowerTools (APT) 4.09 is compatible with virtually all SCSI devices, including IDE, Fast/Wide and Ultra SCSI drives, and PCI, SCSI, Ultra SCSI, and NuBus adapter cards. It will even support multiple SCSI buses. APT 4.09 is fully SCSI Manager 4.3 compatible and will work with media formatted under previous releases.

From its easy-to-operate user interface, APT 4.09 optimizes your drives as it formats them and anticipates problems, fixing them on the fly. For Apple System 7.5 users, APT 4.09 will allow you to create the 4GB partitions supported by that version of the operating system. For optimized CD-ROM use, order APS PowerTools CD AutoCache.

CAT. #	ITEM DESCRIPTION	PRICE
105155	APS POWERTOOLS 4.09 FULL VERSION	\$99.95
105156	APS POWERTOOLS CD AUTOCACHE	79.95
106407	APT PRO PACK	149.95

800-374-5681
24 Hours a Day, 7 Days a Week

APS MS 4300

MICROPOLIS

- Over 4GB of high-performance storage
- MR heads and PRML read channel technology

Terrific performance and high capacity combine to make the APS MS 4300 an excellent storage solution for file servers and single-user systems alike. The 7200 rpm APS MS 4300 uses an Ultra SCSI interface and multi-segmented read ahead caching to supply fantastic read and write speeds. Using MR heads, PRML read channel technology, and ID-less sectors, the APS MS 4300 is able to hold more than 4GB of data in its 3.5", low profile form factor. In addition to outstanding speed, the APS MS 4300 delivers exceptional reliability with a 650,000 hour MTBF rating and a five-year warranty. The external drive has the benefits of our award winning SR 2000 or APS Pro enclosure and our patent-pending IC²E technology.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000	APS PRO
2141-004	APS MS 4300	\$999.95	\$1,049.95	\$1,099.95
2180-004	APS MS 4300AV	1,099.95	1,149.95	1,199.95

APS MS 4300w

MICROPOLIS

- 7200 rpm Ultra SCSI Wide drive
- Backed by a five-year warranty

Delivering more than 4GB of high-performance data storage, the APS MS 4300w is a terrific choice for use with disk-intensive applications from high-end graphics and multimedia to massive database. The APS MS 4300w uses a 7200 rpm mechanism and an Ultra SCSI Wide interface to pump data through at blinding speeds on an Ultra SCSI Wide bus. The APS MS 4300w has an MTBF rating of 650,000 hours and a five-year warranty. The external drive has the benefits of our award winning SR 2000 or APS Pro enclosure and our patent-pending IC²E technology.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000	APS PRO
2163-004	APS MS 4300W	\$1,099.95	\$1,149.95	\$1,199.95
2188-004	APS MS 4300WAV	1,199.95	1,249.95	1,299.95

Drive Specifications for 4GB Hard Drives

Drive	Avg. Seek Time	Trans. Rate Sust. Read	Trans. Rate Sust. Write	Warranty	MTBF	Formatted Capacity	Intl. Price Per MB
APS MS 4300	N/A	*8.02MB/S	*9.36MB/S	5-YEAR	650,000	**4240MB	.24
APS MS 4300W	7.1 MS	*7.47MB/S	*8.73MB/S	5-YEAR	650,000	**4340MB	.25
APS MS 4300AV	N/A	*8.02MB/S	*9.36MB/S	5-YEAR	650,000	**4240MB	.26
APS MS 4300WAV	7.1 MS	*7.47MB/S	*8.73MB/S	5-YEAR	650,000	**4340MB	.28
APS ST 4300	8.7 MS	*6.46MB/S	*8.04MB/S	5-YEAR	1,000,000	**4148MB	N/A
APS Q 4300	4.6 MS	*8.20MB/S	*10.04MB/S	5-YEAR	800,000	**4240MB	.21
APS Q 4300W	4.2 MS	*8.35MB/S	*11.95MB/S	5-YEAR	1,000,000	**4240MB	.26
APS WD 4300	4.7 MS	*6.88MB/S	*9.22MB/S	5-YEAR	1,000,000	**4200MB	.26
APS WD 4300W	4.3 MS	*6.88MB/S	*10.02MB/S	5-YEAR	1,000,000	**4200MB	.29

The blue bar indicates the drive with the best cost per MB and the gold bar indicates the drive with the best transfer rates.

*Testing using a native ultra SCSI bus.

**Formatted in multiple partitions

Specifications subject to change without notice. All drives are tested on a Power Mac 9500/120x.

APS Q 4300

Quantum

- Accelerated 7200 rpm spindle speed & Ultra SCSI interface
- New low profile form factor

Fulfilling your dreams for an outstanding mass storage solution, the 7200 rpm APS Q 4300 delivers 4.2GB of formatted storage space in a low profile form factor. Using an embedded servo and MR heads, the drive sports sustained reads of up to 8.20MB per second and sustained writes of up to 10.04MB per second with an average seek time of 4.6 ms. This 7200 rpm drive ships externally in our SR 2000 or APS Pro enclosures which both supply our patented Digital Active Termination to provide more reliable SCSI transmissions. The APS Q 4300 is backed by a five-year warranty and is rated at 800,000 hours MTBF.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000	APS PRO
2109-004	APS Q 4300	\$899.95	\$949.95	\$999.95

APS Q 4300w

Quantum

- 7200 rpm spindle speed and Ultra Wide SCSI interface
- Wide SCSI speed

With its Ultra Wide SCSI interface and 4.2MB of formatted storage space, the APS Q 4300w is ideal for many applications where large amounts of data need to be transferred at lightning fast speeds. This 7200 rpm drive uses an embedded servo and MR heads to deliver an average seek time of up to 4.2 ms, with a sustained read time of 8.35MB per second and a sustained write time of 11.95MB per second. A 1MB cache buffer keeps the drive running smoothly. The APS Q 4300w is available externally in our SR 2000 or APS Pro enclosures and includes a 5-year manufacturer's limited warranty.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000	APS PRO
2164-004	APS Q 4300W	\$1,099.95	\$1,149.95	\$1,199.95

Glossary

Access Time: the amount of time (usually in milliseconds), that it takes a drive (hard drive, tape drive, CD-ROM drive, etc.) to make the requested information available to the computer. It includes (depending on drive type) actual seek time, rotational latency, head settle time, rewind or fast-forward time, and command processing overhead time. Access time is CPU independent, meaning that it is the same regardless of the speed of the attached CPU.

Address, Block Address: the unique address given to each block of data on the drive partition. Each one must be unique, and each is used to contact a specific location. The computer uses the block address to keep track of all data. Operating systems can only address a set number of blocks per partition, determining the allocation block size.

Allocation Block Size: the size of the smallest addressable data block on the drive. Because each partition has a limited number of block addresses, the total storage space can only be split up into that many data blocks. A partition with, for example, one billion bytes of storage, can have at most one million block addresses. Each block will then be one thousand bytes. Even if a file takes up only 3 bytes, it requires 1000 bytes on the drive, because two pieces of data cannot share a block address. If a file is 1001 bytes, it will take up two blocks (2000 bytes) because the one byte that won't fit in the first block must have a block of its own. Because each partition has its own block addressing table, partitioning the drive into several smaller partitions will increase the total number of available block addresses, making each individual block smaller. This can significantly increase the usable storage space on a drive.

Asynchronous, -ly: a mode of SCSI operation where each byte is requested, sent, and acknowledged before the next is requested, sent, etc. See Synchronous. Also, system commands in the Macintosh, such as a format, which take place in the background without tying up the CPU.

ATA see IDE

(Continued on page 11)



APS Q 9000

- Combines an Ultra SCSI interface & 7200 rpm spindle speed for outstanding performance
- Available in our new APS Pro enclosure



The APS Q 9000 will put an end to your storage worries by providing plenty of reliable storage space. Amazingly, the APS Q 9000 is capable of packing its 8.6GB of formatted storage space onto a 3.5" half-height mechanism. This 7200 rpm drive utilizes a PRML digital channel and MR heads deliver sustained reads of up to 8.31MB per second and sustained writes of up to 11.31MB per second with an average seek time of 4.3 ms on an Ultra SCSI bus. The drive is available in our award winning SR 2000 enclosure or our new APS Pro enclosure which has our patented Digital Active Termination to provide reliable SCSI transmissions and a larger fan with IC2E technology. The APS Q 9000 is backed by a 5-year limited warranty and is rated at 800,000 hours MTBF.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000	APS PRO
2109-009	APS Q 9000	\$1,499.95	\$1,549.95	\$1,599.95

APS MS 9000

- 9GB capacity on a 3.5", half height drive
- Available configured for AV applications



Providing the large 8.6GB capacity that's needed for many audio/video and multimedia projects, the APS MS 9000 is a great choice for many applications. The 7200 rpm drive uses a digital PRML read channel and MR heads to deliver an average seek time of up to 4.3 ms, with sustained write times of up to 10.04MB per second and sustained read times of up to 8.2MB per second on an Ultra SCSI bus. The AV version of the drive takes advantage of Micropolis AV firmware to deliver exceptional AV performance and also uses an advance thermal calibration scheme to ensure smooth data flow. The drive is covered by a 5-year manufacturer's limited warranty and is available in our SR 2000 enclosure and our new APS Pro enclosure.

CAT. #	ITEM DESCRIPTION	INTERNAL	SR 2000	APS PRO
2049-009	APS MS 9000	\$1,899.95	\$1,949.95	\$1,999.95
2180-009	APS MS 9000 AV	1,999.95	2,049.95	2,099.95

MICROPOLIS

APS ST 9000

- Based on third-generation Seagate Barracuda technology
- Available in the new APS Pro enclosure



By incorporating an embedded servo, the APS ST 9000 eliminates thermal compensation and maintains the uninterrupted data-transfer rates that are required in professional A/V, high-resolution graphics and imaging environments. The 7200 rpm APS ST 9000 delivers 8.6GB of formatted storage space with an average seek time of 8 ms through its Ultra SCSI interface. The drive integrates a digital PRML channel and MR heads to increase areal density and to optimize the read and write elements. The APS ST 9000 is rated at 1,000,000 hours MTBF and is covered by a 5-year manufacturer's limited warranty. Available in our new APS Pro enclosure.

CAT. #	ITEM DESCRIPTION	SR 2000	APS PRO
2138-008	APS ST 9000	\$2,199.95	\$2,249.95



APS is now bundling Nisus Writer 4.1 at no extra charge with all of its formatted hard drives and M-POWER systems.

APS Pro™: The Enclosure for Today and the Future

APS is proud to introduce our newest external drive enclosure – the brand new APS Pro. Packed with features and designed for reliability, the APS Pro is the enclosure of choice whether you're looking for style, cooling power, convenience or esthetics. Designed from the ground up with the cooling and power demands of high-performance 7200 rpm mechanisms, the newest 10,000 rpm mechanisms or the 15,000 rpm mechanisms of the near future, the APS Pro is the enclosure of choice for your future storage needs. From its premium 40 watt heavy-duty, auto-switching, digital power supply to its full metal shielding, to its esthetic and functional, impact-resistant shell, the exciting new APS Pro is the premium enclosure for today and for the future. The APS Pro is, of course, a stackable enclosure with a slightly rounded top providing extra room above the drive mechanism for optimal air circulation. The APS Pro can also be positioned vertically on its integrated resilient rests, or incorporated into stacks of APS SR 2000 enclosures by using the exclusive APS TRANSITION PLATE. The giant 60 x 25mm fan delivers over 20 cubic feet per minute of air flow around the drive mechanism and incorporates APS exclusive patent-pending IC2E technology to minimize unnecessary fan noise while delivering optimal cooling efficiency – in fact, it's 2DB quieter than our SR 2000 enclosure! We've moved the power switch to the front of the enclosure for convenience, but recessed it to prevent accidental power-downs. The APS Pro, incorporates APS' patented DAterm technology to give you the best possible performance on a SCSI bus. The APS Pro is the drive enclosure for tomorrow's high performance mechanisms, yet it's available today – only from APS.



Great Value on High-Capacity Drives

APS Hard Drives

APS Q 9000W

Quantum®

- Uses the latest technology for outstanding performance and reliability



Using the Ultra Wide SCSI 3 interface, the APS Q9000W delivers the ultra-high performance and nearly 9GB of formatted storage space that is needed by today's data-hungry applications. Using a digital PRML channel and MR heads, the APS Q9000W delivers an average seek time of up to 4.6 ms, with a sustained read time of 8.2MB per second and a sustained write time of 10.04MB per second. This 7200 rpm drive is also available externally in our new APS Pro enclosure which delivers over 20 cubic feet of airflow around the drive mechanism to keep the drive optionally coded. The APS Q9000W is backed by a 5-year limited warranty and is rated at 800,000 hours MTBF.

CAT. #	ITEM DESCRIPTION	INTERNAL	EXTERNAL	APS PRO
2164-009	APS Q 9000W	\$1,599.95	\$1,649.95	\$1,699.95

APS ST 9000W

Seagate

- Ultra Wide SCSI interface
- 7200 rpm for lightning quick transfers
- Available in our new APS Pro external enclosure



With its integrated leading-edge technology including an embedded servo, MR heads and a digital PRML channel, the APS ST 9000W is ideal for delivering applications like digital A/V, multimedia and image processing that require very fast transfers of massive amounts of data. The 7200 rpm APS ST 9000W delivers 8.6GB of formatted storage space and uses field-proven third-generation Seagate Barracuda drive technology. The drive is rated at 1,000,000 hours MTBF and is backed by a 5-year manufacturer's limited warranty and is available in our award winning SR 2000 enclosure or our new APS Pro enclosure.

CAT. #	ITEM DESCRIPTION	SR 2000	APS PRO
2139-008	APS ST 9000W	\$2,299.95	\$2,349.95

APS MS 9000W

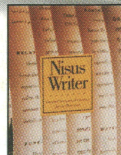
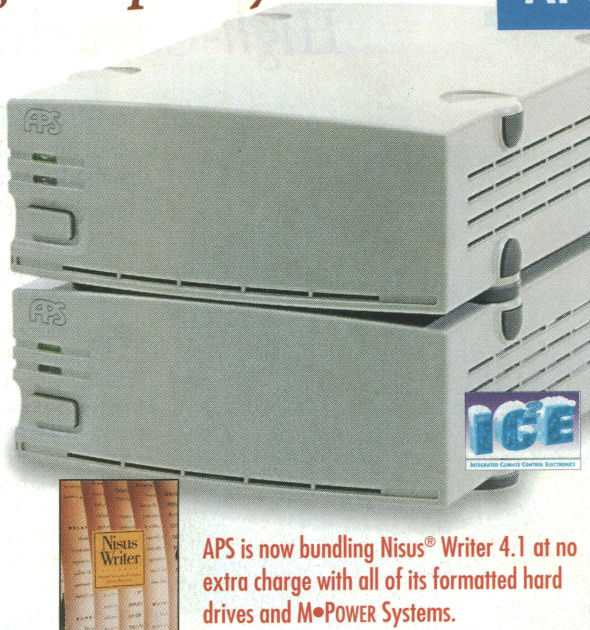
MICROPOLIS

- Combines Ultra Wide SCSI interface & 7200 rpm spindle speed
- Available in our new APS Pro enclosure
- Includes the acclaimed Micropolis AV Gold™ firmware



With 8.6GB of storage space and a Ultra Wide SCSI interface, the APS MS 9000W hard drive delivers the speed and performance that professional AV designers need. The 7200 rpm drive takes advantage of Micropolis firmware to deliver exceptional performance. The APS MS 9000W uses MR heads and a PRML digital channel to deliver an average seek time of 4.6 ms, with sustained write times of up to 10.04MB per second and sustained read times of up to 8.2MB per second on a Ultra Wide SCSI bus. The drive is covered by a 5-year manufacturer's limited warranty and is available in our award winning SR 2000 enclosure or our new APS Pro enclosure.

CAT. #	ITEM DESCRIPTION	SR 2000	APS PRO
2111-009	APS MS 9000W	\$2,049.95	\$2,099.95
2188-009	APS MS 9000W AV	2,149.95	2,199.95



APS is now bundling Nisus® Writer 4.1 at no extra charge with all of its formatted hard drives and M•POWER Systems.

Drive Specifications for High-Capacity Hard Drives

Drive	Avg. Seek Time	Trans. Rate Sust. Read	Trans. Rate Sust. Write	Warranty	MTBF	Formatted Capacity	Intl. Price Per MB
APS MS 9000†	4.9 MS	8.23MB/S	9.81MB/S	5-YEAR	650,000	*8669MB	.22
APS MS 9000AV†	4.9 MS	8.23MB/S	9.81MB/S	5-YEAR	650,000	*8669MB	.22
APS Q 9000†	4.3 MS	8.31MB/S	11.31MB/S	5-YEAR	800,000	*8682MB	.17
APS ST 9000†	8.0 MS	8.90MB/S	10.30MB/S	5-YEAR	1,000,000	*8600MB	N/A
APS MS 9000W†	4.6 MS	8.42MB/S	10.07MB/S	5-YEAR	650,000	*8681MB	.23
APS Q 9000W†	4.6 MS	8.35MB/S	11.95MB/S	5-YEAR	800,000	*8682MB	.18
APS Q 9000WAV†	8.2 MS	8.35MB/S	11.95MB/S	5-YEAR	800,000	*8682MB	.20

The blue bar indicates the drive with the best cost per MB in this group. The gold bar indicates the drive with the best transfer rates in this group

*Formatted in multiple partitions.

†Native Ultra SCSI Bus

All drives tested on a Power Mac 9500/150.

Specifications subject to change without notice.



Endust for Electronics

Regular cleaning of your electronic devices keeps them looking great and may help prolong the life of those products. This safe, effective cleaner picks up dust, preventing it from clogging air vents. The spray also helps prevent the build-up of static charges to help keep your keyboards, printers, SCSI devices, and other electronic products dust-free. The 4 oz. spray comes in a pump dispenser and is intended for use on exterior surfaces only.

106622 4 OZ. PUMP SPRAY \$2.95

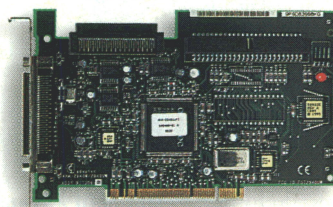
PCI Ultra SCSI Host Adapter for Mac

Adaptec PowerDomain™ 2940UW

- Get the most from your Ultra SCSI capable drives
- Installs in seconds, transparent operation
- Combines Fast, Wide, and Ultra SCSI on a Mac PCI bus
- Supports transfer rates as high as 40MB/sec. on SCSI-2 bus

Ask your Sales Person for Details

SPECIAL \$199.95* *With the purchase of an APS Ultra Wide hard drive.



(Glossary Continued from page 10)

Backup: the most important word in the list. It means a copy of (or the act of copying) one's data onto a different (and reliable) storage media from which it can be retrieved at some later time as needed.

Boot, -ing, -ed: the act of a computer reading into memory special files (called System or operating system Files). This happens automatically when you turn a computer "on" or "boot." In order to boot properly, a Macintosh needs to have access to the files which are stored in the System Folder on either a hard disk or removable media disk drive. A "cold" boot is one that occurs when the computer is powered-off. A "warm" boot is the restart of a computer which is already powered-on.

Boot Drive: the hard disk (or removable media disk) which contains the special system files (the System Folder) required to make a Macintosh boot properly.

Boot Partition: the partition on the boot drive that contains the special system files (the System Folder) required to make your computer boot.

Buffer (drive or disk buffer): a portion of RAM (see cache) which is used to "smooth out" data transfers. Data is read

into the buffer and then onto the target drive. As data flows from one drive to another, there may be skips or gaps as the drive supplying the data seeks the next file or processes another command. The buffer supplies data until the data supply from the drive's data surfaces can be restarted.

Bus: computer jargon, for the path or system for moving data from one part of a computer to another.

Cache, -ing: special RAM used to store frequently, recently accessed or predictably requested data. Caching is done automatically by the computer and sometimes by the drive. The only user-configurable parameter is the amount of system RAM allocated to the system cache. All Macintosh computers have a system cache, and all modern hard drives and CD-ROM drives have a RAM cache integrated into the drive itself. See Drive Cache.

CD-ROM drive: the hardware necessary to read data from a CD-ROM disc. Rated by transfer speed, a single speed (1X) CD-ROM drives reads data at 150KB per second. Double speed (2X)

(Continued on page 14)

800-374-5681
24 Hours a Day, 7 Days a Week

APS DLT – The Superior High-Speed, High-Capacity Backup Solution



DLT autoloaders give you up to 280GB of unattended backup

Each table-top or rack-mount unit includes a DLT drive pre-mounted in a sophisticated autoloading mechanism, complete with either five or seven data cartridges, depending on the model you choose. The DLT4500 can backup up to 200GB* with compression. The DLT4700 model holds seven cartridges for a capacity as high as 280GB with compression. Each DLT autoloader comes with a two-year manufacturer's limited warranty.

CAT. #	ITEM DESCRIPTION	PRICE
2017-030	APS DLT30 DRIVE	\$2,999.95
2017-040	APS DLT40 DRIVE	4,999.95
2017-200	APS DLT4500 TABLE-TOP LOADER (5 CART.)	8,899.95
2017-280	APS DLT4700 TABLE-TOP LOADER (7 CART.)	10,499.95

*Assuming 2:1 compression

The APS DLT Series

- Great for graphics pros & network administrators
- Incredible backup speeds – up to 100MB per minute
- Up to 40GB per tape with hardware compression



Delivering mind-numbing backup speed and capacity, APS DLT drives provide the perfect solution for graphics professionals who need to backup large graphics or multimedia files, databases and source codes. They're also perfect for near-line archiving and network backups. Capable of real-life backup speeds of 100MB per minute, and compressed capacities of up to 40GB on a single tape*, APS DLT drives are the ultimate solution for anyone who needs to backup huge quantities of data very quickly. Each DLT40 cartridge has a native capacity of 20GB, up to 40GB compressed*. The DLT30 stores 15GB on each of its tapes with a compressed capacity of up to 30GB. All APS DLT drives come in our full-height enclosure with our patented Digital Active Termination, Retrospect backup software by Dantz, a premium SCSI cable, and a two-year limited warranty.



See Page 57 for Retrospect Remote 10 and 50 packs

DLT Cartridges

High-quality, reliable media cartridges are the secret to unlocking the awesome speed and capacity of DLT drives.

CAT. #	ITEM DESCRIPTION	PRICE
1019-020-008	DLT20 CARTRIDGE	\$45.95
1019-030-008	DLT30 CARTRIDGE	49.95
1019-040-003	DLT40 CARTRIDGE	109.95
1019-907-008	CLEANING CARTRIDGE	49.95



Comparison Chart

CURRENT PRODUCTS	DLT	QIC	4MM (DAT)	8MM	DLT ADVANTAGE
CAPACITY (GB)*	30/40	4	8	10	1.4 TO 10 TIMES LARGER
TRANS. RATE (MB/MIN)	UP TO 100	UP TO 30	UP TO 50	UP TO 30	2 TO 4 TIMES FASTER
HEAD LIFE (HRS)	10,000	5,000	2,000	2,000	2 TO 5 TIMES LONGER
TAPE LIFE (PASSES)	500,000	10,000	5,000	1,500	50 TO 100 TIMES LONGER

Which APS backup solution is right for you?

User Profile	Drive	Technology	Capacity and Media	Speeds (Typical)
Affordable personal backup . Lowest cost solution with great performance on individual work stations or small LocalTalk networks.	HyperQIC™ See page 15	QIC 3095 minicartridge	4GB native per tape, using TR-4 cartridges. Up to 8GB compressed.	Up to 25MB per min.
The standard for network and workstation backup at a NEW LOWER PRICE. Great performance combined with the lowest cost per MB of storage.	HyperDAT® See page 15	4mm DDS-2 DAT with hardware data compression	4GB native per 120m tape. Up to 8GB compressed. Also uses 60m and 90m tapes.	Up to 28MB per min.
The fastest DDS-2/DC DAT drive backs up at up to 50MB per minute. It's the DDS-2 performance leader for workstation and Ethernet backups.	HyperDAT® Pro See page 14	4mm DDS-2 DAT Quad-speed with data compression	4GB native per 120m tape. Up to 8GB compressed. Also uses 60m and 90m tapes.	Up to 50MB per min.
All new DDS-3/DC DAT drive completely backward compatible with DDS-2 and DDS-1 media. Perfect backup device for high-end workstations and high speed networks.	HyperDAT® III See page 14	4mm DDS-3 DAT with hardware data compression	12GB native. Up to 24GB compressed	Up to 58MB per min.
The superior tape solution in both speed and capacity. Ideal for digital video, multimedia, and large data files . Archives huge amounts of data at very high speeds on local workstations and servers or across high-performance networks.	DLT Drives See page 12 AIT See page 13	Digital Linear Tape with hardware data compression 8mm with hardware data compression	Up to 40GB per tape (DLT40) or 30GB per tape (DLT30). Also uses DLT20 Tapes. 25GB native. Up to 50GB compressed.	Up to 100MB per min. Up to 180MB per min.
Network administrators and anyone else who needs to backup huge amounts of data.	DL1 & DL2 Systems See page 13	4mm DDS-2 DAT Autoloader	4GB native per 120m tape. Up to 78GB with 17 tapes. Up to 136GB with compression.	Up to 28MB per min.

Exceptional tape backup speed & capacity

Backup Systems

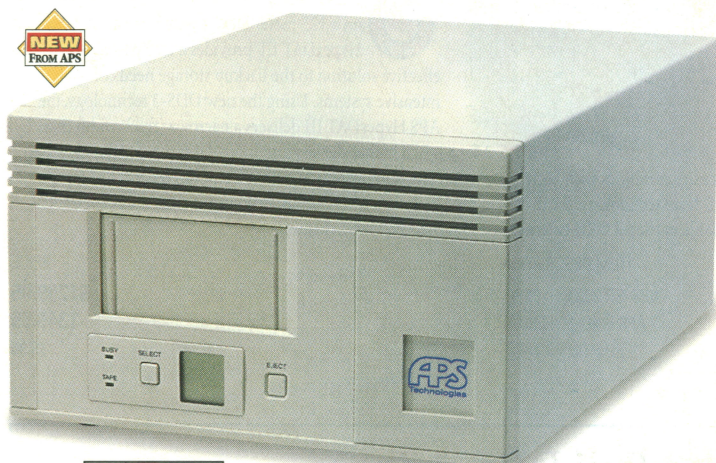
APS AIT Backup System



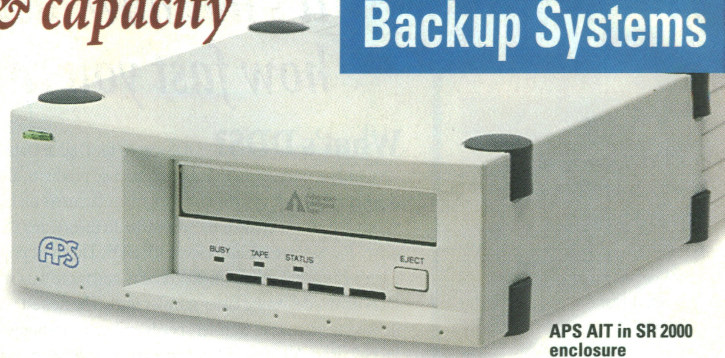
- 25GB native capacity
- Transfer rates of up to 6MB per second
- Fast/Wide SCSI interface
- Now available in our new APS Pro enclosure

Imagine being able to back up 50GB on a single 8mm tape cartridge at speeds of up to 6MB per second. The APS AIT utilizes Sony's extensive technology expertise in 8mm tape recording to do just that. With 25GB native storage capacity per cartridge and 50GB of storage using 2:1 data compression, the APS AIT is designed to deliver a 200,000 hour MTBF, a head life of up to 30,000 hours and up to 20,000 media uses. Using its Fast/Wide SCSI interface, the APS AIT sports a sustained data transfer rate of 6MB per second using data compression on a Fast/Wide SCSI bus. The APS AIT ships in our external SR 2000 or APS Pro enclosure and includes Retrospect backup software, a data cartridge, a cleaning cartridge and a two-year limited warranty.

CAT. #	ITEM DESCRIPTION	CAPACITY	SR 2000	APS PRO
2167-020	APS AIT	25GB NATIVE (50GB COMPRESSED)	\$3,999.95	\$4,049.95



See Page
57
for Retrospect Remote
10 and 50 Packs



APS AIT in SR 2000 enclosure

What's AIT?

AIT stands for "Advanced Intelligent Tape," and was developed by Sony for the purpose of efficiently and reliably storing large amounts of data. AIT drives use a special 8mm tape, which, in the near future, will have a built-in memory chip called the MIC. The MIC chip is capable of storing information specific to that piece of media and in certain situations, it will improve data access and reliability. The drive allows for faster data transfers by using a 68-pin Fast/Wide SCSI-2 interface. APS recommends that AIT drives be used on a Fast/Wide SCSI-2 or Ultra Wide SCSI bus.

APS Mini DAT Library

- 64GB Unattended Compressed Capacity
- Fast transfer rate of up to 50MB per minute



With a potential capacity of up to 64GB, the APS Mini DAT Library provides an immediate solution to the storage needs of large servers and multi-server environments. The APS Mini DAT Library uses an 8-cartridge magazine and incorporates the Sony SDC7000 DDS-2 quad speed drive mechanism, delivering a data transfer rate of up to 50MB per minute. A unique cartridge transport system within the APS Mini DAT Library moves cartridges by pushing them, avoiding mis-grips and positioning issues of conventional cartridge picking systems. The APS Mini DAT Library ships in our external full height enclosure with Retrospect backup software, a premium SCSI cable and is backed by a one-year limited warranty.

CAT. #	ITEM DESCRIPTION	PRICE
2147-064	APS MINI DAT LIBRARY	\$2,599.95
1021-060	SONY 60M DAT CARTRIDGE	7.95
1021-090	SONY 90M DAT CARTRIDGE	8.95
1021-120	SONY 120M DAT CARTRIDGE	21.95

Unattended DDS-2 DAT backups of up to 136GB!

APS DL1 & APS DL2 DAT Autoloader Systems

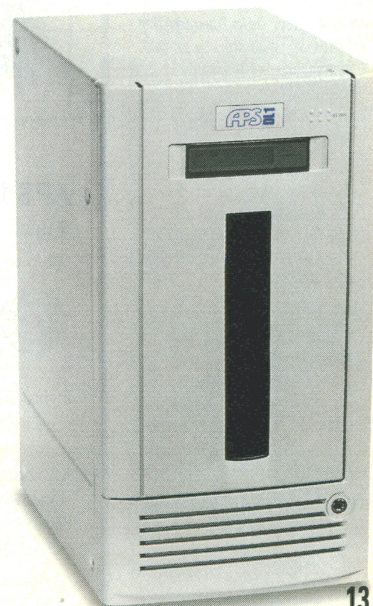
- High-performance, high-capacity DDS-2 autoloader backup system
- Up to 136GB capacity with 2:1 data compression, using 17 - 120m tapes
- Data transfer rates as high as 28MB per minute
- Door with key lock for added security



Combining exceptional tape backup speeds and awesome storage capacity, the APS DL-series autoloading DDS-2 backup systems are designed to maximize the efficiency and convenience of automated, unattended data backup. Network administrators and anyone else who needs to backup huge amounts of data will appreciate the autoloader's 136GB capacity using 17 - 120m tapes and 2:1 data compression. These autoloaders come with an empty 17 tape magazine which is easily accessible and removable from the autoloader's front door. APS DL systems along with the included software help alleviate the confusion of large, multiple-tape backups by automatically switching tapes during the backup cycle and tracking the location of files among the tape backup set. Providing data transfer rates as high as 28MB per minute, the single-drive APS DL1 employs a Sony SDC5000 DDS-DC drive mechanism and quick AIWA autoloading robotics which keep the APS DL1 performing at an optimal level by completing tape loading cycles within five seconds. Macintosh versions of the APS DL1 include a premium SCSI cable and the latest version of Retrospect backup software by Dantz. The APS DL2, dual-drive DDS-2 autoloader, is available for OS workstations and servers, and takes advantage of that operating system's multitasking capabilities by running backups to both DDS-DC DAT drives concurrently.

CAT. #	ITEM DESCRIPTION	PRICE
2144-136	APS DL1 (SINGLE DRIVE, MACINTOSH OR OS/2)	\$4,999.95
2165-136	APS DL2 (DUAL DRIVE, OS/2 ONLY)	6,999.95

APS recommends that a cleaning cartridge is kept in the top slot of the tape magazine. Regular cleanings will help prolong the life of the DAT drive.



13
800-374-5681

It's not how fast you can backup that matters, it's how fast you can be back up after disaster strikes

(Glossary Continued from page 11)

drives have 300KB/sec transfer rates. 6X drives support 900KB/sec transfer rates, etc. CD-ROM drives increase their transfer rate by spinning the CD-ROM faster, causing more data to travel under the read head each second. A single speed CD-ROM drive spins the disc between 200-500 RPM. Faster drives spin the disc at multiples of this speed. See CLV.

CISC (Complex Instruction Set Computer): the processor and motherboard architecture of non-PowerPC Macs and most IBM compatibles.

CPU (Central Processing Unit): the chip on the computer's motherboard which ultimately controls all the activity of your computer. Standard Macs have a 680x0 chip (x=0, 2, 3, or 4) manufactured by Motorola. PowerPC Macintoshes use a new RISC chip designed by a conglomerate of computer hardware manufacturers, including Apple, IBM, and Motorola. Most IBM compatible computers use a chip based on Intel's x86 architecture.

DAT (Digital Audio Tape): a magnetic media developed originally for the storage of audio data in digital form, but used with a computer to store (backup) data. Tapes are measured in length, and come in 60-, 90-, and 120-meter (currently) sizes and are certified for digital data storage applications.

DaTerm (Digital Active Termination): a patented APS technology for the termination of SCSI devices. DaTerm eliminates many SCSI bus problems by eliminating noise and signal reflection on the SCSI chain

DDS (Digital Data Standard): a standard for data storage on DAT. It allows interchangeability between different manufacturers' DDS-compliant mechanisms

DDS-2: a newer DDS standard using narrower tracks on each DAT tape. It allows up to a 50% increase in the amount of data (over DDS-1) which can be stored on a DAT tape.

DDS-3: the newest version of the DDS standard. DDS-3 doubles the data density on the surface of the tape and improves the tape format over DDS-2. Because the data is more tightly packed on a tape, the transfer rates are also increased dramatically.

DDS-DC/DDS-2-DC (DDS-Data Compression): a hardware (Continued on page 22)

What's DDS?

DDS stands for Digital Data Standard. It was written and developed through a collaborative effort between Sony and HP to set the standard for 4mm Helical-Scan data storage products, also known as DAT. Helical-Scan simply refers to the way that the data is written onto the tape, in the shape of a helix. DDS set specific limits for manufacturers on tape length, tape formulation and the specific way that data is read and written to and from the tape, so that everyone would do it the same way. In theory, any DDS DAT tape that was written on any DDS DAT drive should be able to be read by any other DDS DAT drive. Today, there are other forms of DDS. The most popular include DDS-2 and the new DDS-3. DDS-2 standards differ from DDS-1 standards by using a narrower track width for higher density and more data storage. The heads in DDS-2 DAT drives spin faster and the tape mechanism moves tape faster than in DDS drives, delivering faster transfer rates. The newest version of the DDS standard is called DDS-3. It provides for an even narrower track width than DDS-2, delivering even faster transfer speeds and up to a whopping 12GB native on a 125 meter tape—more than 3 times the capacity of a DDS-2 120 meter tape in a DDS-2 drive. All APS DDS-3 drives are backwards compatible with DDS-1 and DDS-2 and the DDS-2 drives likewise are backwards compatible with DDS-1.



APS HyperDAT® III

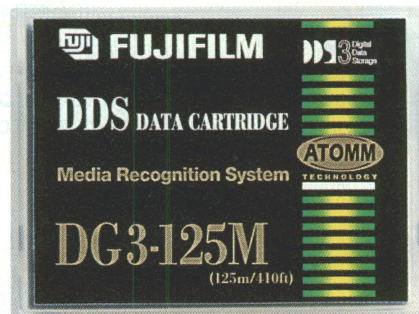
- Up to 3 times the capacity of DDS-2
- New DDS-3 technology



Delivering the power to store up to 12GB native on a 125 meter DDS-3 tape, the new APS HyperDAT III provides a compact, cost-effective solution to the backup storage needs of data intensive systems. Using the new DDS-3 technology, the APS HyperDAT III delivers a narrower track width than

DDS-2 for a much higher density and more data storage. The increased density combines with Sony's precise tape control system to deliver a sustained data transfer rate of 2.4MB per second. By implementing the new Hyper Metal™ head technology, the drive can read back data at a higher signal output than the conventional ferrite heads used in DDS-2 drives. The drive ships is available in the SR 2000 external case and the APS Pro enclosure.

CAT.#	ITEM DESCRIPTION	PRICE
2147-024	APS (SR 2000) HYPERDAT III	\$1299.95
2147-024-808	APS (PRO) HYPERDAT III	\$1349.95
106680	FUJI DDS-3 TAPE	\$39.95



Fuji DDS-3 Tapes

Now there's a high quality DDS-3 data cartridge to complement the new generation of DDS-3 tape drives. Fuji's DDS-3 data cartridges deliver up to 12GB of native capacity on a 125 meter tape when used with a DDS-3 tape drive. This is a three-fold increase over the current 120 meter DDS-2 tapes. Fuji's DDS-3 tapes utilize the new Advanced Super Thin-Layer and High-Output Metal Media (ATOMM) technology, a new coating method, to achieve a magnetic layer with superior high density recording characteristics, simultaneously coated over a non-magnetic layer of titanium material for durability.

CAT. #	ITEM DESCRIPTION	PRICE
106680	DG3-125M FUJI	\$39.95

APS HyperDAT® Pro

- Backup restore speeds as high as 50MB per minute!
- Up to 8GB* of storage per 120m DAT tape



If you've searched for a way to do your DAT backups in less time, this is the answer for you. The new APS HyperDAT Pro is perfect for time-critical backup and restore applications. It sets the standard for DDS-2 DAT backup with real-world backup speeds of as high as 50MB per minute. This drive uses standard 120m DDS-2 tapes with capacity of up to 8GB (with hardware compression.*) The HyperDAT Pro can also use economical 60m and 90m tapes, either new or those which have been written by other DDS-1, DDS-2, or DC compatible drives. The APS HyperDAT Pro comes with Retrospect 3.0 backup software, a premium APS SCSI cable, a two-year warranty, and our 30-day money-back guarantee. When you choose this drive in our external SR 2000 enclosure, you'll also get the benefits of our patented Digital Active Termination. The APS HyperDAT Pro is absolutely the fastest DDS-2 drive you'll find anywhere. Now with IC'E technology, a radical concept in enclosed climate control.



*Assumes 2:1 data compression

CAT. #	ITEM DESCRIPTION	PRICE
2147-008	APS HYPERDAT PRO (INTERNAL)	\$949.95
2147-009	APS HYPERDAT PRO (EXTERNAL)	\$999.95
1018-120	MAXELL 120M DAT TAPE	\$21.95

Your Best Value in Personal Tape Backup

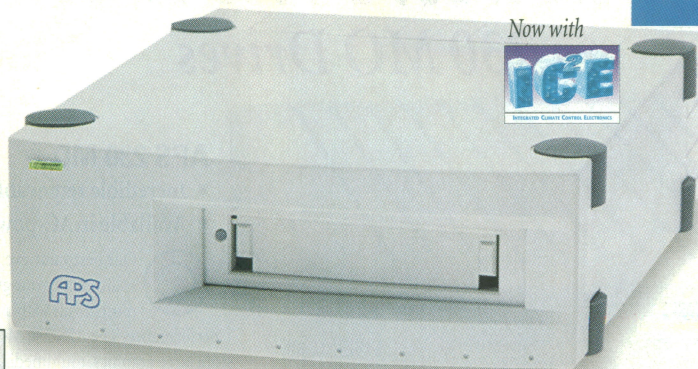
HyperQIC™

- Transfer rates as high as 30MB per min.
- 4GB native, 8GB compressed*
- Uses standard Travan 4 or QIC-Wide3080XLF data cartridges
- Backward compatible with many QIC and Travan formats

Remote 10-Pack Remote 50-Pack

Don't depend on the users in your network to protect their own valuable information. Remote 10- or 50-pack lets you give full Retrospect network backup flexibility to as many machines as are on your network.

(Remote 10-packs and 50-packs require that you have Retrospect.)



APS HyperQIC™

Our HyperQIC drive uses Travan 4 tape cartridges to deliver up to 4GB on a single tape without compression! (8GB with 2:1 data compression.) We've kept the price under \$450 to make this the best value in Mac personal backup. Priced hundreds of dollars less than DAT with better performance than most DDS-2 drives, the APS HyperQIC automatically senses the most efficient speed to use with your system, shortening your backup time as much as possible. The APS HyperQIC is read and write compatible with QIC3095 and QIC3080 cartridges. The drive can also read QIC80, QIC3010, QIC3020, and Travan 1, 2, and 3 tape cartridges. (While the APS HyperQIC will accept all of the media listed, compatibility issues with the software used to record those tapes may make it impossible for you to read those tapes with your current backup software.) The APS HyperQIC comes with the Retrospect 3.0 backup software by Dantz Development, a premium APS SCSI cable, a two-year warranty, and the benefits of our award-winning SR2000 enclosure and our patent-pending ICE technology.

CAT. #	ITEM DESCRIPTION	CAPACITY	PRICE
2094-004	APS HYPERQIC (EXTERNAL)	4-8GB PER TAPE	\$399.95
1021-308	SONY QW-3080 XLF CARTRIDGE	2-4GB PER TAPE	31.95
106590	SONY QTR-4	4-8GB PER TAPE	36.95

*Assumes 2:1 data compression

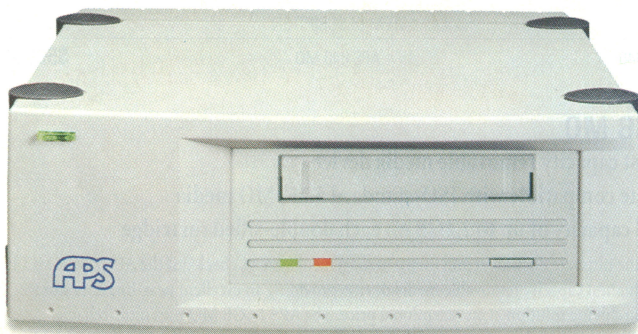
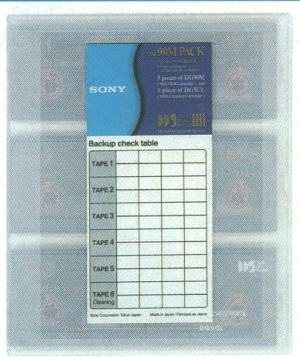
New Travan 4 from SONY



5-Tape Backup Strategy for All Tape Drives, One Tape Just Isn't Enough! APS Exclusive!

For an effective Monday - Friday backup scheme using your APS drive, you will need at least five cartridges. You start with a full backup of all your data each Friday. This "Grandfather" tape should be stored off-site. Use the four remaining tapes for incremental backups, using one for Monday, Tuesday, Wednesday, and Thursday. The current day's incremental cartridge is the "Son." The previous incremental backup cartridge is the "Father." Using this scheme, you have a clear Son to Father to Grandfather path of data restoration should disaster strike. Includes cleaning tape.

CAT. #	ITEM DESCRIPTION	INTRODUCTORY PRICE
106684	5 DG 90, PACK	\$44.95



APS HyperDAT®

- Up to 8GB* of storage on one 120m DAT tape
- Transfer rates up to 28MB per minute

Delivering backup speeds as high as 28MB per minute, this DDS-2 backup system can pack up to 8GB on a single 120m DAT tape! Setting the standard for high-capacity, high-speed backup, the APS HyperDAT can also use 60m or 90m tapes, either new or as written by other DDS-1, DDS-2, or DC compatible drives. In our SR 2000 enclosure with DaTerm, the APS HyperDAT comes with Retrospect backup software, a premium SCSI cable and a limited two-year warranty.



CAT. #	ITEM DESCRIPTION	PRICE
2035-008	APS HYPERDAT (INTERNAL)	\$849.95
2035-009	APS HYPERDAT (EXTERNAL)	899.95
1018-902	MAXELL CLEANING TAPE	12.95

Additional Tape cartridges sold on page 31.

*Assumes 2:1 data compression

APS HyperQIC™

Everything you need
to get started with
4mm DAT backup



DAT Starter Kit

DAT Starter Kit

- Five DAT tapes (90 or 120m)
- One DAT head cleaner
- One LabelOnce DAT Starter Kit
- One 4mm DAT cube

CAT. #	ITEM	PRICE
100592	90M KIT	\$69.95
100590	120M KIT	129.95



HyperQIC Starter Kit

HyperQIC Starter Kit

For an effective Monday
through Friday backup

- Three TR-4 cartridges
- One minicartridge drive cleaner kit

CAT. #	ITEM	PRICE
106625	HYPERQIC KIT	\$129.95



See Page
31
for DAT Media

800-374-5681
24 Hours a Day, 7 Days a Week

APS 230 MO in
SR 1000 enclosure



APS 230 MO

- Incredible removable media drive value!
- Available in AC-powered portable or SR 2000 enclosure

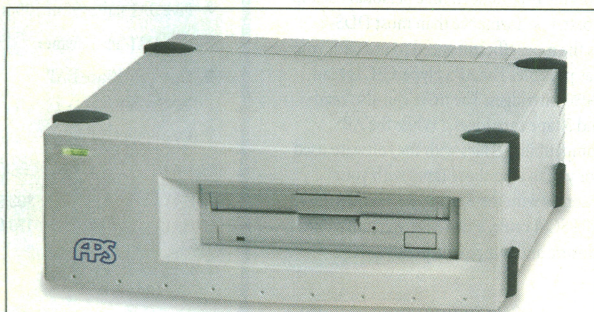


Our best value ever in magneto-optical devices, the APS 230 MO is the perfect solution for your growing data storage needs. It uses a 4200 rpm low profile mechanism with a 256KB cache buffer to deliver outstanding MO performance.

The APS 230 MO is compatible with 230MB and 128MB MO cartridges to store large graphics, multimedia, and database files. The MO media is also an excellent solution for sharing files with friends or transporting data when you travel. Choose the APS 230 MO in our AC-powered portable SR 1000 enclosure, and enjoy optimal transportability.

The drive is also available in our award-winning SR 2000 drive enclosure which has our patented Digital Active Termination and our new patent-pending IC'E Technology. The APS 230 MO is rated at 50,000 hours MTBF and is backed by a two-year limited warranty.

CAT. #	DRIVE ENCLOSURE	PRICE
2155-231	APS 230 MO, AC-ONLY PORTABLE SR 1000	\$299.95
2155-230	APS 230 MO, SR 2000 EXTERNAL	379.95
106591	OLYMPUS 230 MO CART. 5-PACK	49.95

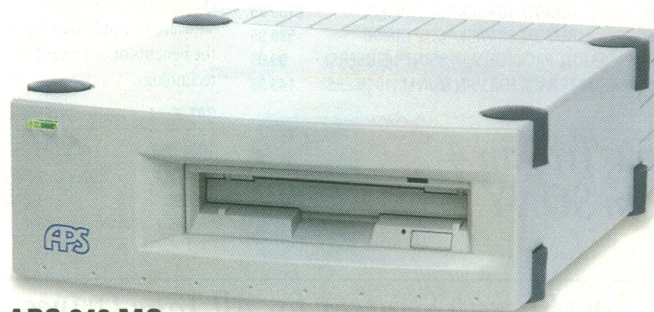


APS 230 MO in SR 2000 enclosure

Magneto-Optical Media

Magneto-optical (MO) media is a convenient, reliable storage solution for graphics professionals and others needing high-capacity, near-line storage. In the production of this catalog, we send all of our text and image files to our printer on three 1.3GB MO cartridges. The printer then generates plates directly from the data on the MO media.

SIZE	BRAND	CAT. #	1-4	5+
3.5" 128MB	MAXELL	1018-128	\$16.95	\$14.95
	SONY	1021-128	18.95	16.95
3.5" 230MB	MAXELL	1018-230	24.95	22.95
	SONY	1021-230	22.95	20.95
3.5" 540MB	SONY	106621	46.95	44.95
3.5" 640 MB	SONY	106626	46.95	44.95
5.25" 1.3GB	MAXELL	1018-001	68.95	66.95
	SONY	1021-001	68.95	66.95
	3M	1017-001	72.95	70.95
5.25" 2.3 GB	SONY	106627	89.95	87.95
5.25" 2.6GB	3M	106148	98.95	96.95
	MAXELL	106559	96.95	94.95



APS 640 MO

- Compatible with both 640 and 230 MO media
- Read-only compatibility with 128 MO cartridges
- Terrific MO drive performance



Supplying a stunning formatted capacity of up to 606MB on 3.5" 640 MO media, the new APS 640 MO is an excellent storage solution for a host of applications. Use reliable MO cartridges to store large graphics and database files, send data to service bureaus or colleagues, and transport large amounts of data when traveling. In addition to 640 MO media, the ISO-standard APS 640 MO is backward compatible with 230 MO media, and read-only compatible with 128 MO cartridges. To help keep your projects moving, the drive provides exceptional MO performance with sustained reads of up to 2.19MB per second and sustained writes of up to 1.85MB per second. An excellent value, this drive is available externally in the SR 2000 enclosure with DaTerm and our patent-pending IC'E technology. The APS 640 MO is backed by a two-year limited warranty.

CAT. #	ITEM DESCRIPTION	EXTERNAL
2132-640	APS 640 MO	\$599.95



APS 2.6GB MO

- Our highest capacity removable media device
- Read / Write compatible with ISO-standard 5.25" MO media
- Formatted capacity of up to 2.4GB on each double-sided cartridge



For the ultimate document and image management system, check out the APS 2.6GB MO. It's our highest capacity removable media device, providing an excellent near-line data storage and archiving solution at an exceptional price. The APS 2.6GB MO uses ultra-reliable magneto-optical media which has a formatted capacity of up to 2.4GB on each double-sided cartridge, yet is read/write compatible with other ISO-standard 2.3GB and 1.3GB MO cartridges. Its terrific capacity makes the APS 2.6GB MO a great storage solution for large image files, network storage, and other demanding data storage applications. The drive's 3600 rpm mechanism is rated at 100,000 hours MTBF and is backed by a one-year limited warranty.

CAT. #	ITEM DESCRIPTION	INTERNAL	EXTERNAL
2014-003	APS 2.6GB MO	\$1,699.95	\$1,799.95

Prices and specifications subject
to change without notice.

16

800-374-5681
24 Hours a Day, 7 Days a Week

APS Has Your High-Capacity Removable Media Storage Solution

APS Removables

The APS Jaz Drive

by Steven Bobker

I've never seen reviews like those that Iomega's new 1-gigabyte Jaz drive has received. That's not all good. In my experience, universal raves often indicate a good, but not great product. Look at the first Power PCs, look at the first PowerBooks. Really, really good. Not great. So I got an APS Jaz and expected good, not great.

Jaz is the exception that proves the rule. Great is an understatement. In two words: Oh Wow! In one word: YES!

I immediately started using my APS Jaz system as my start-up volume. Set-up was software free plug-and-play (try that Windows users!). Why'd I do that? The Jaz cartridge is a nice, well-protected, and reasonably sturdy unit that can hold just about every conceivable System Folder. Couple that capacity (at a reasonable price) with performance equal to, and often better than many of today's better hard drives, and you have the ability to run multiple custom environments. Now I play games using a VM-free, low extension environment start-up cartridge that makes games fly. I telecommunicate using a highly tweaked cartridge where Netscape and Open Transport actually run reliably. My full-extensions, full fonts cartridge gets the most use (it's in there right now). There's a special system to use when beta testing touchy software. Soon, I see adding programming and heavy-duty graphics environments cartridges.

The reason for these customized System cartridges is performance and safety. By using separate systems I can easily tweak much more than fonts and extensions. If I goof major league and blow out a system, well, the others still work.

I do suspect that right now the APS Jaz drive is being sold mostly as a backup and file transportation system. It should be. It excels at both tasks with good economy and great speed. However, it's as a highly customizable hard drive that it really shines.

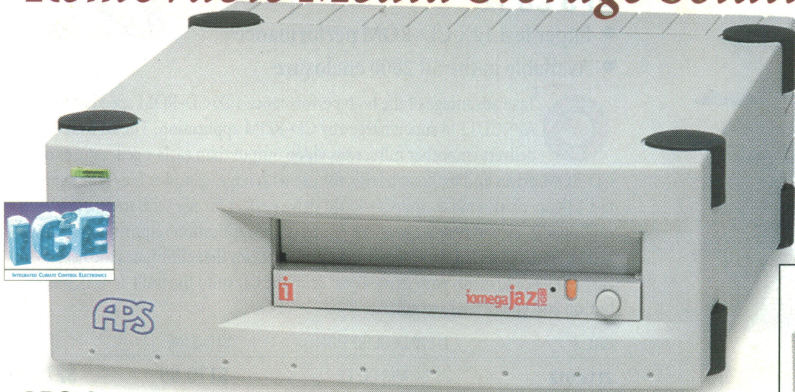
Please heed this warning. Don't try an APS Jaz, don't even watch a demo unless you're willing to get one immediately. They're that good.



New LabelOnce Kit for Jaz
See Page 32



APS Jaz in SR 1000 enclosure



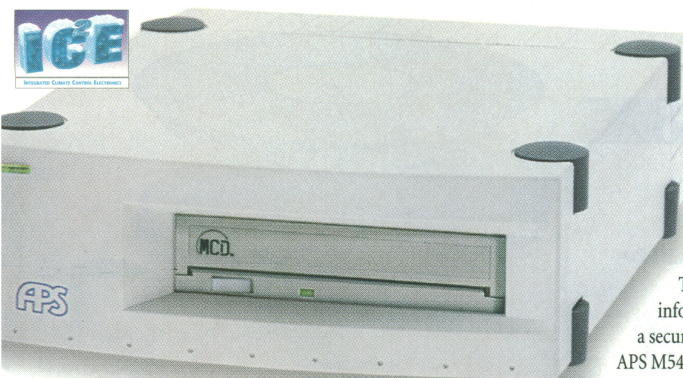
APS Jaz

- Huge 1GB capacity on removable media
- Hard drive like performance

Delivering impressive removable media capacity and performance rivaling many hard disk drives with transfer rates up to 4.38MB per second, the APS Jaz is a great solution for your growing data storage needs. The APS Jaz uses removable data cartridges which have a huge 1GB capacity, so expanding your system's capacity is as easy as adding more Jaz cartridges. The APS Jaz drive offers unlimited storage possibilities, yet it's compact enough that you can easily transport it between your home and office computers! Use the APS Jaz to run large multimedia applications, store and transport immense graphics or database files – even backup a hard drive. Performance specifications for the APS Jaz make it compatible with a broad spectrum of application software, and it's available in either the lightweight (AC powered only) SR 1000 enclosure, or the SR 2000 enclosure, both of which feature APS' patented DATerm technology. The SR2000 enclosure has our new patent-pending ICE Technology. The APS Jaz has been engineered to run cool during hours of use. It's rated at 250,000 hours MTBF and is backed by a one-year limited warranty.

CAT. #	ITEM DESCRIPTION	AC ONLY PORTABLE SR 1000	CAT. #	SR 2000
2156-001	APS JAZ WITH 1 CARTRIDGE	\$499.95	2156-002	\$499.95
2156-001-516	APS JAZ WITH 3 CARTRIDGES	599.95	2156-002-516	599.95
103272	1GB JAZ CARTRIDGE	89.95		89.95

See page 20 for Jaz CD-R Mastering Systems.



APS M540

Now you can store even more files on convenient, removable media without sacrificing speed. The APS M540 stores a whopping 540MB on each 3.5" Nomai MCD removable cartridge. Its 4500 rpm mechanism provides data transfer rates of up to 3.04MB per second with a 9.69 ms average seek time. Use the reliable high capacity media to store your text, graphics, spreadsheet, audio, and video files.

This convenient removable media is a great way to share information with colleagues, or to store sensitive information in a secure, locked area. In addition to the 540MB media it uses, the APS M540 is fully compatible with SyQuest 270 cartridges, making it a convenient way to upgrade to new, higher capacity technology while leveraging your existing media investment. The APS M540 is available in our award-winning SR 2000 enclosure and with our patent-pending ICE technology.

- Up to 540MB on each Nomai MCD removable cartridge
- Also reads, writes and initializes SyQuest 270 cartridges

CAT. #	ITEM DESCRIPTION	SR 2000
2152-540	APS M540 WITH 1 CARTRIDGE	\$299.95
2152-540-516	APS M540 WITH 4 CARTRIDGES	499.95
102415	540MB NOMAI MCD CARTRIDGE	59.95

APS SQ 5200

- Uses 44, 88 and 200MB cartridges for greater storage flexibility
- Gives you up to 190MB of interchangeable online storage

Since graphic files come in a wide range of sizes, it makes sense to have a removable cartridge drive that can accommodate a variety of cartridge capacities. The APS SQ 5200 delivers the diverse media sizes you need, reading, writing and formatting 44MB, 88MB and 200MB cartridges. When you order this drive in our SR 2000 enclosure, you'll be adding the benefits of APS' patented Digital Active Termination to your SCSI chain. Choose the online removable media drive that gives you multiple storage options – the APS SQ 5200. Per SyQuest Technology Corporation specifications, this drive ships without a fan in our external enclosure

CAT. #	ITEM DESCRIPTION	INTERNAL	EXTERNAL
2037-200	APS SQ 5200	\$349.95	\$399.95





APS CD 12

- Super fast 12X CD-ROM performance
- Available in the SR 2000 enclosure

12X

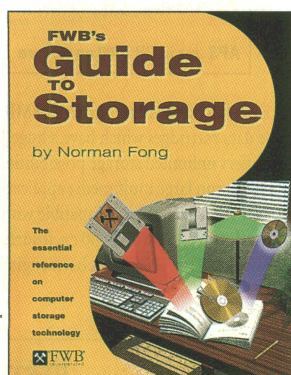


Take advantage of the high performance 12X CD-ROM speed of the new APS CD12 to supercharge any CD-ROM application. The APS CD12 delivers smoother full screen video output than earlier generations of CD-ROM drives and makes it terrific for use with large, complex files. The super fast 12X speed also makes this CD-ROM drive perfect for use with interactive multimedia, virtual reality programs or any other application requiring rapid data access. The APS CD12 uses a tray loading mechanism that eliminates the need to carry a CD caddy with your drive—just drop the CD onto the built-in tray, push a button and you're ready to go!

CAT. #	ITEM DESCRIPTION	SLIMLINE	SR 2000
2119-012	APS CD 12	\$179.95	\$279.95

FWB's Guide to Storage

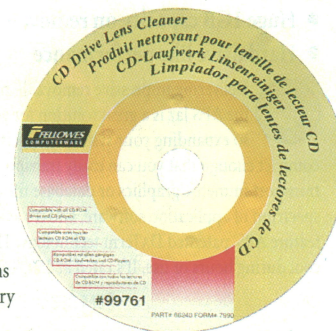
By Norman Fong. If you've ever wondered how that SCSI peripheral device sitting on your desktop actually works and how it communicates with your computer, this is the book you need. Answering those questions and more, this guide by the president of FWB, Inc., covers all types of peripheral devices, RAID technology and storage interfaces such as SCSI, serial SCSI, and IDE. The book also has an excellent troubleshooting guide and an informative section on expansion buses.



CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106722	FWB'S GUIDE TO STORAGE	\$29.95	\$24.95

CD-ROM Drive Lens Cleaner

Over time, dust and dirt will contaminate the lens of your CD-ROM drive. This may cause poor performance and inaccurate reads. To safely clean the lens of your drive, use the CD-ROM Drive Lens Cleaner. For best results, clean your drive after every eight hours of use. (Not for use with APS PD4.)



105309	CD-ROM DRIVE LENS CLEANER	\$19.95
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APS CD Changer

- It's like having four separate CD-ROM drives in the space of one
- Direct loading mechanism eliminates trays and caddies

Holding up to 4 CD-ROMs in a half-height mechanism that's the same size as most single-disc CD-ROM drives, the new APS CD Changer is the perfect drive to handle your growing CD-ROM usage. This four-disc CD-ROM changer operates at 8X speed, making it an excellent match with high-end multimedia, or any other CD-ROM intensive application. The APS CD Changer uses an efficient tray-less direct loading and unloading design which safely draws discs into the mechanism and quickly ejects them in much the same manner that a cassette tape is ejected by a car stereo. It's unique mechanism works equally well in horizontal and vertical installations. Operation of the APS CD Changer is easy, too. The drive allows you to easily move from disc to disc at the click of a mouse. The APS CD Changer is available for internal installation, or externally in our patented award-winning SR 2000 enclosure, and it is backed by a one-year limited warranty.

CAT. #	ITEM DESCRIPTION	INTERNAL	EXTERNAL
2166-008	APS CD CHANGER	\$399.95	\$449.95
2166-008-800-1	APS CD CHANGER IN APS PRO		499.95



Everything you need to design, print and apply professional CD labels

NEATO™ CD Labeler Kit

- Create your design with template software
- Print with any color or B/W printer on to NEATO labels

It comes with a CD-ROM containing label templates for Mac, DOS and Windows systems. After selecting a design that's appropriate for your project and adding your label information, you can print them on the included labels using any ink jet or laser printer. The starter kit of labels includes 36 white, 36 gold and 30 silver CD labels.

The challenging task of perfectly positioning your printed labels on a CD is made easy thanks to the NEATO label applicator system. The label applicator includes a base unit with a hole in the middle where you position the label, adhesive side up. Then you simply place your CD on the positioning cone label side down, and insert the cone into the base unit until the CD contacts its label, and presto – perfect labeling every time.



106578	NEATO CD LABELER KIT	\$69.95
106579	100 WHITE CD LABELS	19.95
106580	100 GOLD CD LABELS	19.95
106581	100 SILVER CD LABELS	19.95

Create Exciting Multimedia CDs with an APS CD-R!



APS CD-R Pro

- Our fastest CD-Recordable drive
- Comes with an open hard drive bay pre-prepped for a scratch disk for successful initial burns
- Includes TOAST 3.0 software



Step up to the next level in recordable CD systems with the APS CD-R Pro. It's our fastest recordable CD solution with both 4X read and 4X write capabilities. The Yamaha recording mechanism lets you master multimedia and audio CDs at 1X, 2X, or 4X speeds in any standard recording format, including CD-ROM, CD-DA, CD-ROMXA, and CD-I. You may also choose disk-at-once, track-at-once, or multisession recording options. The APS CD-R Pro gives you the option of adding a scratch disk in the same enclosure if your future needs require it. The APS CD-R Pro comes with TOAST 3.0 recording software, a premium SCSI cable, and a one-year warranty. If you're looking for the fastest CD recorder available, the APS CD-R Pro is your solution.

CAT. #	ITEM DESCRIPTION	FULL HEIGHT
2134-004	APS CD-R PRO IN FULL HEIGHT ENCLOSURE	\$1,299.95
2134-004-800	APS CD-R PRO IN APS PRO ENCLOSURE	999.95

2X6 CD-R For Just \$499⁹⁵



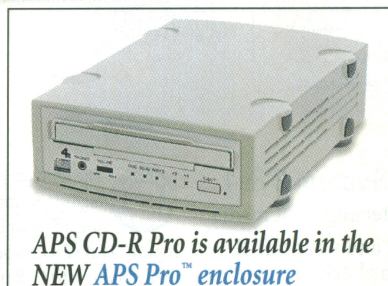
APS CD-R

- 2X record, 6X read mechanism
- Creates backup and play!



This drive provides 2X recording and 6X CD-ROM playback, making it ideal for creating multimedia CDs or backing up a hard disk drive at double speed, as well as playing CDs at 6X speed. The drive supports all recording methods specified in the Orange Book Part II, including disk-at-once, multisession and packet recording, making it compatible with Retrospect software for use as a backup device. The APS CD-R also uses random access to locate a particular backup file much more quickly than backups recorded on tape. The CD-R media used by the APS CD-R has an estimated 100-year shelf life. The APS CD-R includes cables, a caddy and a FREE copy of the award-winning TOAST CD-ROM Pro 3.0 recording software to master your CDs. The unit is available externally in our award-winning SR 2000 enclosure.

CAT. #	ITEM DESCRIPTION	PRICE
2119-006-500-1	APS CD-R W/TOAST	\$499.95
2119-006-519-1	APS CD-R W/RETROSPECT	499.95
2119-006-518-1	APS CD-R W/DESCRIBE	499.95



APS CD-R Pro is available in the NEW APS Pro™ enclosure

Choose Your CD Mastering Software!

Discribe 110

- ✓ Full Red Book audio support – a \$400 value!
- ✓ Disc Copy feature – a \$200 value!
- ✓ Supports Multisession ISO, Multivolume ISO, and Multivolume HFS CD-ROMs
- ✓ Free upgrades until 1/1/97



Your choice!

TOAST CD-ROM Pro 3.0

- ✓ Supports write speeds up to 6X
- ✓ Allows ISO and Mac parts of Hybrid CD-ROMs to have references to common data
- ✓ Supports Multisession ISO, Multivolume ISO, and Multivolume HFS CD-ROMs



† Or get both TOAST and Discribe for an extra \$49.00. 30-day money-back guarantee does not apply to software.

CD-R (CD Recordable) Media

Recordable CD (CD-R) is a terrific storage media for audio, video, graphics, and text files. The CD-R media is perfect when quick turnaround or low volume distribution of large amounts of data is needed. Each 74-minute CD-R disc stores up to 650MB of data on compact, reliable media, and you'll have rapid random access to your data.

CAT. #		1-9	10+
74-MINUTE CD-R (650MB)†			
1017-650	3M	\$10.95	\$9.95
105212	MAXELL	9.95	8.95
105167	SONY	10.95	9.95

Fuji 74-Minute CD-R Media 10-Pack†

CAT. #	PRICE	MAIL IN REBATE	FINAL PRICE
105297	\$94.95	– \$25.00	\$69.95

Final Price reflects a rebate direct from Fuji. Details on the package. Limit 2 per name. Rebates expire on 6/30/97.
†APS 30-day money-back guarantee not applicable. Product covered by manufacturer's warranty

CD-R Drives

CD-R Tips

by Doug Houseman, MCU, Ltd.

I've found over time that the best way to master a CD-R is to follow these steps:

1. Work with three partitions. One for raw files, one for organized material in the correct location, and one for making a clean copy of the disk before you make your CD-R. Even though a CD-R will hold 650 to 670MB of material, on a Mac the largest partition that makes sense to make a CD-R from is 640MB.
2. Determine the amount of material that will go on the disk and make a partition that is slightly smaller in size. Use even size block allocation blocks (i.e. multiples of 16MB). Always make and format fresh partitions before mastering. Use Norton Utilities Speed Disk to completely erase the partition before you fill it, if you are not going to do a low level format.
3. Do a drag copy by top level folder to the new disk. One folder at a time. Never copy them all at once and never use Norton Utilities Speed Disk to defragment the master. Get rid of your fragmentation by dragging to a fresh disk.
4. Open and place all of your windows after you have made the drag copy. Place icons and other items where they need to be on the CD-R. Try not to overlap items that need to be used together. Run Norton Utilities Disk Doctor to ensure that there are no problems with the bit map, or the bundle bits.
5. Name the partition you will be copying from with the name that the CD-R should have.
6. Run a test simulation of the disk and pay attention to the data rate. If you cannot sustain at least 300 KB, then make the CD-R at single speed. If you cannot sustain 150 KB, then consider making the CD-R from a different hard disk or Mac.
7. Make sure you run the latest version of a virus checker on the master and the boot disk before you master the CD.
8. Turn off all extensions you know you do not need to make the CD-R.
9. If you need to make an ISO 9660 disc, remember that the "pure" version of this standard requires all file names to be 8.3 (12345678.ABC) and all in capital letters or numbers. Use a disk cataloging utility before you master to make sure that you have all the files changed to comply with the standard.
10. Test it until you are sure it looks good. Run Norton Disk Doctor and look for bad blocks, etc. Now you can send it off and make millions of copies.



APS Jaz / CD-R Mastering System 2 & 4

- A terrific, inexpensive CD-R mastering solution
- Includes a Jaz drive, one Jaz cartridge and a CD-R drive in a single full-height enclosure

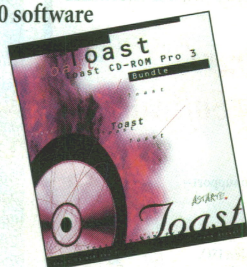
Creating a CD-R mastering system from a Jaz drive and a CD recording drive makes great sense. The removable Jaz media, with its 1GB capacity, has ample capacity to store a CD master before burning it onto CD-R media. Using several Jaz cartridges, you can build an archive file of frequently used CD masters. The exceptional performance of the Jaz drive keeps the recording process moving. In addition to a Jaz drive, this mastering system's full-height enclosure holds a CD-R drive. You can choose a 2X record/6X read Sony mechanism or a 4X record/4X read Yamaha mechanism. Both CD-R mechanisms support all of the recording methods specified in the Orange Book Part II, including disk-at-once, multisession and packet recording. To give you a complete CD recording solution and an even better value, these CD mastering systems come with TOAST 3.0 recording software.

CAT. #	ITEM DESCRIPTION	PRICE
2119-020	APS JAZ / CD-R MASTERING SYSTEM 2 (JAZ; 2X/6X CD-R)	\$999.95
2156-040	APS JAZ / CD-R MASTERING SYSTEM 4 (JAZ; 4X/4X CD-R)	1,599.95

APS CD-R Mastering System 2 & 4

- The perfect system for mastering CD-R media
- High-performance 4X read and write CD-R and a High-performance hard drive
- Includes TOAST 3.0 software

Included with all
APS CD-R Systems



The ultimate goal when burning CD-R media is a successful burn on the first try, minimizing wasted media. Our new high-performance CD-R Mastering Systems help you meet that goal. Combined in a single full-height enclosure, you'll find a high-performance CD-R drive and either 2GB or 4GB of high-performance storage. You'll also receive a copy of TOAST 3.0 recording software to complete the task. 2GB or 4GB drives are ideal for CD mastering. Allowing you to create multiple 634MB partitions (the size of a 74 minute CD) so you can keep frequently used masters on the disk and still have room to create new masters. Using the dedicated hard disk also lets you create your master in clean, unfragmented disk space, further minimizing the potential for recording errors and wasted media. The mechanisms used are optimized for uninterrupted data flow to help ensure a successful burn. These CD-R Mastering Systems incorporate a 4X Yamaha CD-R drive which uses newly developed hardware and control technology to reduce read and write errors at high speeds. It's capable of reading and writing at 1X (real time), 2X and 4X speeds. You can choose disk-at-once, track-at-once or multisession recording options using your choice of CD-ROM, CD-ROMXA, CD-I or CD-DA recording formats.

CAT. #	ITEM DESCRIPTION	PRICE
2176-020	APS CD-R MASTERING SYSTEM 2 (4X/4 CD-R; 2GB HARD DRIVE)	\$1,599.95
2176-040	APS CD-R MASTERING SYSTEM 4 (4X/4 CD-R; 4GB HARD DRIVE)	2,299.95



CD Cleaning Kit

This kit removes damaging dust and dirt without scratching your CDs, improving their performance.

105308	CD CLEANING KIT	\$10.95
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Master Your Own Music, Prototype Your Own CD-ROMs With Sony CD-R Discs!



CAT. #	ITEM DESCRIPTION	1-9	10+
105167	SONY 74 MIN CD-R MEDIA	10.95	9.95



CDSP-200

Tree Dimensions™ CD Spinners

The smooth spinning action of the Tree Dimensions CD Spinners gives you quick access to all of your CDs. Tree Dimensions CD Spinners are made from selected hardwoods and provide a durable and attractive way to store your CDs. Model CDSP-100 holds up to 100 CDs, including slots for 12 double CDs, it measures 14.375" H x 11.875" W x 11.875" D. Model CDSP-200 holds up to 200 CDs, including slots for 24 double CDs, it measures 26.75" H x 11.875" W x 11.875" D. Both models come fully assembled and ready to use.

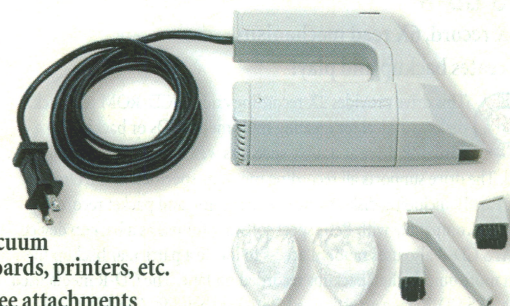


CDSP-100

CAT. #	ITEM DESCRIPTION	PRICE
106615	CDSP-100	\$69.95
106616	CDSP-200	89.95

System Sweeper

- Powerful vacuum cleans keyboards, printers, etc.
- Includes three attachments to reach tight places



We all know that a carpet of dust and debris is harmful to all sorts of sensitive electrical devices, but cleaning all those tight nooks and crannies can be a real challenge. That's where System Sweeper comes in. This powerful 110-volt hand-held vacuum and its three attachments really get the job done. It includes a six-foot power cord and two filters.

CAT. #	ITEM DESCRIPTION	PRICE
100681	SYSTEM SWEEPER	\$29.95
100682	REPLACEMENT FILTER BAGS	5.95



900 MHz Wireless Computer Speaker System

- Crystal clear, static-free audio output from 50 Hz to 15,000 Hz
- 900 MHz wireless signal travels through walls and floors

Delivering exceptional sound to your multimedia and CD-ROM applications, business meetings, and entertainment software, these 900 MHz wireless speakers are the perfect audio companions for your computer. They provide a full frequency response range from 50 Hz to 15,000 Hz to liven up any audio application. The 900 MHz frequency standard has been popularized for many audio and video products due to its clear, static-free signals, and the ability of that signal to travel through walls and floors. Using these 900 MHz wireless speakers gives you exceptional freedom of speaker placement. The speakers can operate on six "C" batteries for true wireless operation or they can be powered by an AC adapter. (8" H x 5.5" W x 5" D)

106618 900 MHZ WIRELESS COMPUTER SPEAKER SYSTEM* \$219.95



Jensen Speakers

- User friendly – all controls on one speaker
- 2-way, high-performance system

Listen to your multimedia projects in their full glory with these powerful, compact speakers. Using a 3.25" woofer and a 2" tweeter, these speakers produce a full range of high-quality sound from 120 Hz to 20,000 Hz. For easier sound customization, all controls – power, volume, bass, treble and balance – are conveniently located on one speaker. Includes a 14 volt DC adapter. (10.1" H x 4.2" W x 5" D)

CAT. #	ITEM DESCRIPTION	PRICE
105368	JENSEN JPS 45 (GRAY)*	\$119.95
105369	JENSEN JPS 46 (BLACK)*	119.95



Boostaroo™

Share the sound of your portable CD, cassette or mini-disk player with a friend – or two – while improving the audio experience for each listener. Boostaroo separates and amplifies the output of your portable music device to high-fidelity stereo with richer sound and greater definition at lower volume settings. The music can then be enjoyed by one, two or three users, using virtually any type of headphone

or portable speaker. While enhancing the music, Boostaroo, which is powered by two AA batteries, actually extends the battery life of the device it's enhancing.

CAT. #	ITEM DESCRIPTION	PRICE
105371	BOOSTAROO*	\$19.95
106156	BOOSTAROO WITH HEADPHONE*	29.95

Wireless Headphones

- 900 MHz performance
- Built-in rechargeable battery

Listen to your favorite music almost anywhere. These wireless headphones by Recoton operate on the same 900MHz frequency as today's super-clear cordless telephones. Simply plug the transmitter into any standard stereo jack on your Mac, television, stereo system or other device and turn the headphones on. They deliver a range of approximately 150 feet and the signal can travel through walls and floors, so you don't have to be in the same room as the transmitter.



106595 WIRELESS HEADPHONES* \$119.95



Sound Control

You won't have to hassle with volume controls on speakers across the room any longer. This device plugs into your Mac and the speakers plug into the volume controller device so you can control your output sound level from wherever it's most convenient – by your monitor.

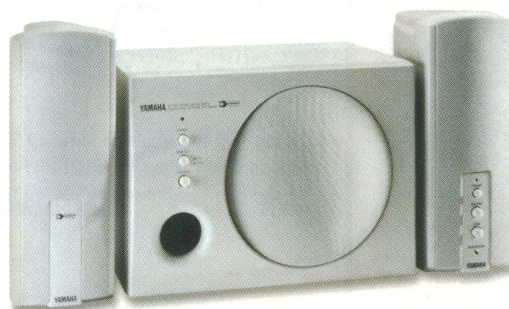
100509 SOUND CONTROL* \$19.95

Computer Microphone

You'll get high-quality audio from this miniature condenser microphone. Use the included Velcro® to mount the microphone to your CPU or monitor, or attach the clothing clip and use it as a lavalier microphone. The microphone has a flexible 7.2' cable with a 3.5mm mini-plug that connects directly to your Mac's audio port.



105370 COMPUTER MICROPHONE* \$24.95



Yamaha System 45 with YST-M15 Speakers

- The ultimate sound system for your computer
- Enhances any multimedia application

Hook this speaker and subwoofer system up to your computer and it'll make you feel like you're part of any multimedia experience. From the deep, chest-thumping booms of your favorite CD-ROM game to the full, rich sound of a multimedia presentation, this speaker system will deliver the powerful audio that your computer has been missing. The system includes 10 watts per channel YST-M15 speakers. They deliver frequency response from 70 Hz to 20,000 Hz. The speakers have dual audio inputs so they can be connected to your stereo and computer simultaneously, and they provide a headphone jack for private listening as well as master power, volume and tone controls. The thundering subwoofer employs a 6.5" magnetically shielded spruce cone to give you an awesome response range from 35 Hz up to 250 KHz at an outrageous 25 watt output. (Subwoofer size: 7.9" H x 11" W x 10.19" D) (9-5/8" H x 3-11/16" W x 6-1/8" D)

CAT. #	ITEM DESCRIPTION	PRICE
106359	SYSTEM 45 SPEAKER AND SUBWOOFER SYSTEM*	\$209.95
106381	YST-M15 SPEAKERS ONLY*	79.95
105367	SUBWOOFER ONLY*	179.95

Adapter Cards

(Glossary Continued from page 14)

compression algorithm used in DAT drives. DDS-DC typically doubles the amount of data that can be stored on a single tape over non-DC drive mechanisms.

DIMM (Dual In-line Memory Module): a physical RAM configuration used in PCI Power Macs.

DLT (Digital Linear Tape): a tape backup technology utilizing 1/4" tape with an extremely high data density. DLT drives can (currently) achieve 100MB per second transfer rates, and can pack up to 40GB uncompressed onto a single cartridge.

dpi (Dots Per Inch): the resolution of a display or output format. Both dimensions are typically given, e.g. 600 X 600 dpi means six hundred dots are displayed per inch horizontally and vertically.

Drive Cache: a term used for RAM (random access memory) which is incorporated into a drive's hardware. Frequently, recently and predictably accessed data read from the drive may be stored in the drive cache. This makes later (or future) access much faster, because the access time is much shorter for RAM than for data read from the spinning platter. Data written to the drive may be stored in the cache, allowing the drive to confirm the write and release the host computer before the data is actually on the physical disk. Combining these two functions of caching, called read caching and write caching, can significantly improve a drive's performance.

Driver, Device Driver: a special piece of software that instructs a computer how to communicate with an electronic device. A Macintosh needs one of these for each drive connected. When told to install a driver, APS PowerTools will put the proper driver in a special partition on your hard disk. For backup devices, Retrospect has the proper drivers built into the program, and automatically configures the proper driver after scanning the SCSI bus.

Embedded Servo: a technology which increases the usable data storage capacity of a hard disk drive and eliminates the need for thermal calibration. Servo information is used to correctly position the read/write head over the data track. Embedded servo technology intersperses the servo information with user data. Spaced along the data tracks, the embedded servo information (Continued on page 30)



Adaptec PowerDomain™ 2940UW and Adaptec PCI Ultra Wide SCSI Master

- Ultra Wide SCSI adapter for both Mac and PC
- Supports transfers up to 40MB/sec

With either the Power Domain or the SCSI Master you can add Ultra Wide SCSI to either a Mac or a PC. Both cards support up to 15 SCSI-1, SCSI-2, SCSI-3 or Ultra SCSI devices in any combination, and support 8- and 16-bit transfers. In addition, both cards provide data transfer rates of up to 40 MB/sec. The Adaptec PowerDomain 2940UW comes with Adaptec's PowerDomain software for the Macintosh. The Adaptec PCI Ultra Wide SCSI Master comes with Adaptec's EZ-SCSI 4.0 software for Windows NT, Windows 95, OS/2, Netware, SCO Unix and UnixWare.

CAT. #	ITEM DESCRIPTION	PRICE
106428	ADAPTEC POWERDOMAIN 2940UW (MAC)	\$299.95
106513	ADAPTEC PCI ULTRA WIDE SCSI MASTER (PC)	299.95



Adaptec SlimSCSI™

- Connect portable PCs to SCSI peripherals via PCMCIA
- Includes Adaptec's EZ-SCSI control software

Use this SCSI host adapter to add a Fast SCSI-2 bus to your notebook PC via the notebook computer's PCMCIA slot.

106516	ADAPTEC SLIMSCSI (PC)*	\$199.95
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ISA - SCSI Controller Card

- Supports all SCSI devices
- Support for DOS, Windows, Windows 95, Windows NT, OS/2

With the 16-bit ISA-SCSI Controller Card from PE Logic, you can use any SCSI device on any PC system that's a 286 or faster. This internal card delivers a SCSI transfer rate of up to 10MB/sec Fast Synchronous. The 16-bit ISA-SCSI Controller Card has a 50-pin internal connection and includes a 36" ribbon cable, BIOS support and a 25-pin external D-SUB connector. The card also comes with free Corel software and includes SCSILogic™, which allows you to boot a P.C. from a SCSI drive.

106658	PEL1620 WITH COREL*	\$129.95
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* APS 30-day money-back guarantee not applicable. Product covered under manufacturer's warranty.



PCI Ultra-W Host Adapter for PCI Bus

- Supports Fast / Wide SCSI 2 & 3 and Ultra SCSI data transfers
- Ultra SCSI data transfer rates up to 40MB per second

Give your PCI-capable IBM compatible computer the benefit of Ultra SCSI (Fast-20) drives by installing this host adapter card in your computer. The QLogic PCI-to-Ultra SCSI Host Adapter is a single-ended card that's capable of asynchronous and synchronous Fast and Wide SCSI and Ultra SCSI data transfers. It can operate in 8- or 16-bit mode, and can accommodate SCSI data transfer rates up to 40MB per second. The host adapter has an on-chip 18 MIPS RISC processor and a 32-bit bus master DMA. The card has a 68-pin, high-density external SCSI connector and both a 68-pin and a 50-pin (ribbon cable) internal connector.

106354	PCI ULTRA-W HOST ADAPTER FOR PCI BUS*	\$349.95
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QLogic Fast!SCSI Mac PCI-W Adapter Card

- Increases the SCSI performance of your PCI Power Mac
- 12-MIPS RISC I/O processor for high data throughput

Push your PCI-based Power Mac to a new level of SCSI performance with the Fast!SCSI Mac PCI-W adapter card from QLogic. The card employs a DMA bus mastering design that is optimized for data-intensive environments like desktop publishing and AV work. The card also integrates a 12-MIPS RISC processor and a SCSI processor in a single chip to deliver astounding data throughput. The Fast!SCSI Mac PCI-W has an HD 68-pin external connector and can support up to 15 SCSI devices. The host adapter card is compatible with Fast SCSI and 20MB per second Wide SCSI standards.

101940	FAST!SCSI MAC PCI-W*	\$379.95
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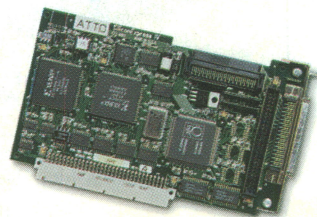
Mac Fast/Wide SCSI Accelerator Card

SiliconExpress IV

- Fast/Wide data transfer rates as high as 20MB per sec.
- Add seven additional SCSI devices

Elevate Fast/Wide SCSI-2 transfer rates as high as 20MB/sec. or up to 10MB/sec. with Fast SCSI drives. HD 68 connection. For NuBus Quadras and Power Macs only.

100619	SILICONEXPRESS IV*	\$849.95
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Upgrade Your Old Drive with an APS SR-Series Drive Enclosure

Use the award-winning SR 2000 drive enclosure to house most any 3.5" half-height or third-height SCSI drive mechanism which requires less than 40 watts of peak power. The SR 2000 includes the benefits of our patented Digital Active Termination (DATerm) and our new patent-pending IC'E technology. DATerm helps ensure more reliable SCSI transmissions with fewer SCSI retries. Our exclusive IC'E technology is a departure from traditional cooling schemes, employing a heat sensing unit which in turn triggers an efficient ball bearing fan to spin as necessary. As the drive mechanism needs more cooling, IC'E signals the fan to spin faster. When the drive cools, the fan slows, or stops, resulting in much quieter operation. IC'E also alerts you if the drive heats beyond the manufacturer's specified operational range by flashing the enclosure's power LED repeatedly from green to orange.

FREE installation video with every SR 2000 enclosure upgrade!



Grounding Wrist Strap

Protect your Mac from electrical damage by wearing this grounding strap while working with static-sensitive internal components.

100410 WRIST STRAP \$5.95

SR 1000 (SR10) AC Only

SR 1000 (SR1C) AC/DC



APS Bracket Kits

CAT. #	ITEM DESCRIPTION	PRICE
100285	PERF 6100, CENT 610 5.25"	\$29.95
100286	PM 8100, 8500 QUADRA 800 5.25"	29.95
100306	PM 8100, Q 800 KIT FOR SYQUEST 88 OR 44	39.95
100298	PM 7100, PERF 600, MAC IIVX, C 650 3.5" BAY	29.95
100299	PM 7100, PERF 600, C 650, MAC IIVX 5.25" BAY	29.95
107307	PM 7200, 7500, 7600, LOWER BAY	29.95
100304	SYQUEST IN PM 7100, C 650, MAC IIVX, 5.25"	29.95
100297	PERF 400, MAC IISI, LC DRIVE	29.95
100303	QUADRA 900, 950 HH DRIVE	29.95
100300	QUADRA 900, 950 FULL HT DRIVE	29.95
100289	SYQUEST IN Q 900, 950	39.95
100287	FACE PLATE FOR DAT IN Q 900	29.95

CAT. #	ITEM DESCRIPTION	PRICE
100294	Q700, MAC IICI, CX DRIVE	\$29.95
100296	MAC II, IIX, IIFX HH DRIVE	29.95
100295	MAC II, IIX, IIFX, FULL HT DRIVE	29.95
100301	MAC SE, SE/30 DRIVE	29.95
100292	MAC CLASSIC	29.95
100293	MAC DUO DOCK DRIVE	29.95
100305	DUO BRACKET	11.95
100302	POWERBOOK 100	11.95
100291	LASERWRITER PRO 630	69.95
100290	IDE DRIVE IN PC	11.95
100288	SCSI DRIVE IN PC	11.95

Kits include brackets, screws, power and data cables where applicable.

Safe SCSI Hot Swapping

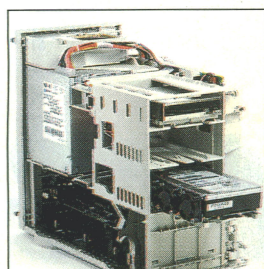
APS SCSI PowerPlug

The APS SCSI PowerPlug and the included software control panel make it easy to add or remove a SCSI device on your Mac without powering down. Swap devices in as little as 30 seconds compared to up to 10 minutes or more to power down, connect or remove a device, and power back up. The APS SCSI PowerPlug comes in two versions: the APS SCSI PowerPlug II which lets you swap devices at the end of the chain and includes Digital Active Termination, and the unterminated APS SCSI PowerPlug NT which has a SCSI splitter device and is used in the middle of the chain. Both APS SCSI PowerPlugs use standard 50-pin Centronics connectors and come with a rubber cap to protect the open end when it's not in use.

Please note: The hot swap process detailed in the control panel must be followed exactly. Failure to follow the instructions may result in system crashes, data corruption, or electrical circuitry damage.



CAT. #	ITEM DESCRIPTION	PRICE
106448	APS SCSI POWERPLUG II (TERMINATED)	\$99.95
106449	APS SCSI POWERPLUG NT (NOT TERMINATED)	79.95

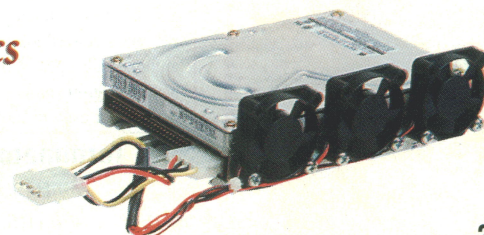


Keep Your Drives Cool in Tower Macs

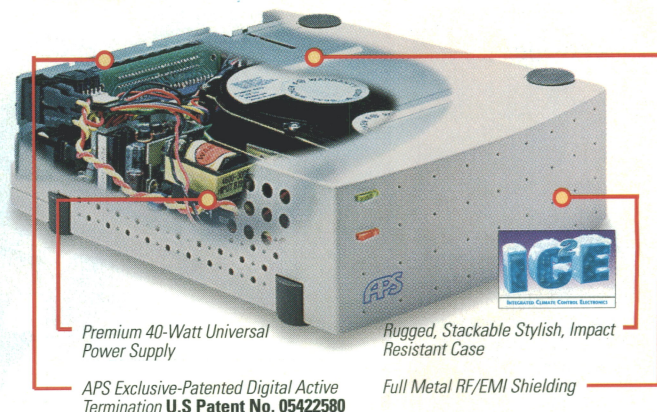
APS MB 3

(3 Fan Bracket System)

Keep your high-performance hard drives cool inside tower-style Mac CPUs by installing our new 3-fan bracket. The bracket installs between your current drive bracket and your hard drive on Quadra 800 and 840AV systems; Power Mac 8100, 8500, and 9500; and Workgroup Servers 85, 8150, and 8550 only. It's an inexpensive way to protect your drive investment by providing the cooling power that's missing in those CPUs.



Enclosures, Cases & Brackets



Premium 40-Watt Universal Power Supply

Rugged, Stackable Stylish, Impact Resistant Case

APS Exclusive-Patented Digital Active Termination U.S. Patent No. 05422580

Full Metal RF/EMI Shielding

APS Drive Enclosure Specifications

All APS enclosures include internal cabling and step-by-step installation guide.

CAT. #	CODE	ITEM DESCRIPTION	CASE DIMENSIONS W X H X D	DRIVE	PRICE
100314	ES	SR 2000 - (CLOSED)	7" x 8.5" x 2.25"	MOST 3.5" DRIVES	\$129.95
100310	SR10	SR 1000 - AC (CLOSED)	6" x 9" x 1.75"	MOST 2.5" DRIVES	49.95
100312	SR1C	SR 1000 - AC/DC (CLOSED)	6" x 9" x 1.75"	MOST 2.5" DRIVES	99.95

Do-It-Yourself Special!

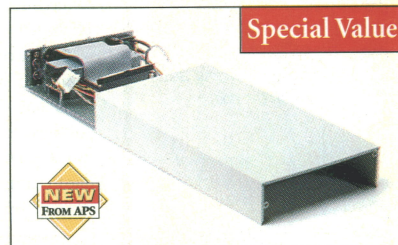
Unbelievable Deal on 5.25" Drive Enclosure!

- Open Front
- Easily accommodates CD-ROM, SyQuest drives - and more

Upgrading to an 8X CD-ROM drive in your CPU? Got an old SyQuest mechanism hanging around? Don't throw those old drives away! Give 'em a new home and new life for just \$29.95!

This unbelievable value on an enclosure with 5v/12v (1 amp each) internal power supply, SCSI ID switch, audio jacks and AC power cord won't last long at this price.

CAT. #	ITEM DESCRIPTION	1-9	10-99	100+
107308	SLIMLINE 5.25" DRIVE ENCLOSURE	\$29.95	\$27.95	\$26.95



Special Value

NEW FROM APS

Connectors

APS SCSI PowerPlugs

by Steven Bobker

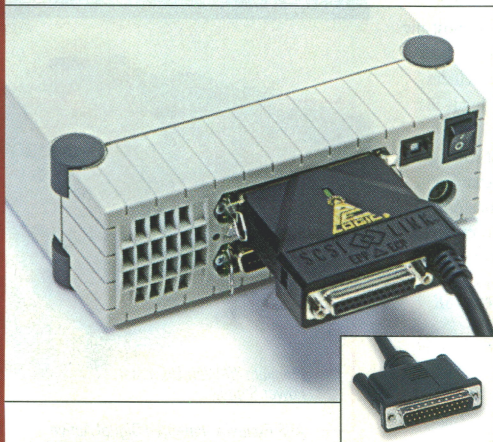
Every SCSI pro knows there's a rule that says once you break your chain by adding or removing ANYTHING, it is forever doomed and cursed. The rule is simple: **ONCE YOU GET A SCSI CHAIN WORKING PERFECTLY, NEVER, EVER TOUCH ANY PART OF IT.** Don't even stare at it. This rule has been verified by many years of hard-earned experience and many SCSI tragedies.

But sometimes you really want to move a component from one chain to another. For example, if you run an AppleTalk-based LAN, generate lots of new data daily, and use DAT for backup, you better schedule a lot of time for those daily backups. Retrospect is efficient, but slow over a net. The ideal method would be to take a really fast DAT box like the HyperDAT Pro and just walk around and plug it in at each station. Then backups would take minutes, not hours. Bringing a CD-ROM writer to the data is another good reason to add a device. But those who break working chains and smart managers don't do that. Or at least not until now.

The new SCSI Power Plug II and SCSI Power Plug NT not only promise a solution to the problem of keeping your chain intact, but they let you do hot-swaps! You can now disconnect and reconnect SCSI devices without shutting down. Not only do the hot-swapped devices work, but you don't even destroy your Mac (the old penalty for anyone brave or stupid enough to try a hot swap). The Power Plug NT is used in the middle of chains, and the II is for use at the end.

I've spent the last few days hot-swapping everything I could find here, including a finicky old SyQuest (an Ehman!) and a Jasmine DD50 steel-cased hard drive. And they all worked. All the time. Amazing. Just amazing.

Connect SCSI Devices To Your PC



SCSI-LINK® II

Use your Mac's SCSI devices on your PC too, with SCSI-LINK II. Use it to connect a CD-ROM, MO, SyQuest, Jaz, tape backup system or PC formatted SCSI hard drive. This parallel port to SCSI device solution attaches to any IBM or compatible PC's parallel (printer) port. It's compatible with ECP, EPP, Bi-directional, Uni-directional, Standard, and PS/2 printer ports. When attached to a PC, up to seven SCSI devices can be connected by daisy-chaining them through the SCSI Link II's 50-pin Centronics male connector. There's also a 25-pin printer pass-through connector to maintain the PC's printing capabilities. SCSI-LINK II supports OS/2, DOS, Windows 95, Windows NT and Windows operating systems, comes with either Corel CD-ROM or CorelSCSI software for DOS and Windows. Corel CD-ROM supports SCSI CD-ROM drives and includes a PhotoCD viewer and an audio CD player. CorelSCSI supports virtually all SCSI devices, including hard drives, removable media drives, CD-ROM drives, scanners, and tape drives. Both provide ASPI drivers. Technical support provided by PEL.



- Connect up to 7 SCSI devices to ANY PC parallel port
- Printer pass-through maintains printing capabilities
- Includes either Corel CD-ROM or CorelSCSI software
- Capable of transfer rates of up to 1MB per second

CAT. #	ITEM DESCRIPTION	PRICE
106409	SCSI-LINK II W/ COREL CD-ROM	\$89.95
106408	SCSI-LINK II W/ CORELSCSI	99.95
106444	CENTRONICS 50F TO DB25M ADAPTER FOR ZIP DRIVE	6.95
106491	CENTRONICS 50F TO MICRO 50M ADAPTER	9.95

Keep Your PowerBook Connected

SCSI DOC™

- Access your PowerBook as a SCSI hard drive in docking mode
- Connect a SCSI peripheral or an entire SCSI chain in SCSI mode



With SCSI DOC, you can easily attach SCSI peripherals to your PowerBook, or access your PowerBook as a SCSI drive from another Mac. This heavily-shielded adapter has a female DB-25 connection and a male HDI 30-pin connector. The HDI 30-pin connector attaches to the PowerBook, and, in either SCSI or docking mode, all you need is a standard 25 x 50 system cable to connect to the adapter. Flip the selector switch to SCSI mode, and you can access SCSI peripherals. Choose docking mode and pin 1 on the HDI 30-pin connector is activated so you can access your PowerBook (except PB 140, 145 or 150) as a SCSI hard drive from another Mac. The adapter comes with a free copy of PowerMerge Limited Edition, a software utility that automatically updates, synchronizes and backs up files between Macs. Please note that on a 500-series Powerbook, the SCSI DOC makes the video port inaccessible. SCSI DOC is compatible with all PowerBooks*, however, two SCSI DOCs cannot be used to connect two IDE-based PowerBooks due to termination issues.

*Duo series requires Duo Dock, Mini Dock, SCSI Micro Dock, or Ultradock.



Great Bundle Deal!

You get PowerMerge Limited Edition with every SCSI DOC purchase.

FREE!

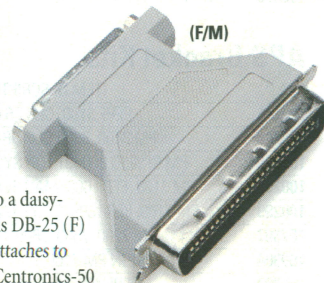
PowerMerge Limited Edition is an easy-to-use file synchronization and disk-to-disk backup software package. Use it when moving files between a PowerBook and a desktop Mac, and PowerMerge will automatically update both computers with the most recent version of any file or group of files you choose. The software will also backup data on one drive to another.

SCSI Terminators

CAT. #	ITEM DESCRIPTION	PRICE
100671	A CENT. 50 TO CENT. 50 FLOW-THROUGH	\$9.95
100670	B PASSIVE (ENDCAP)	8.95
100672	C IIFX	14.95
106490	D DB25 TO DB 25 FLOW-THROUGH	19.95

SCSI PRO™

Instantly convert any DB-25 to Centronics-50 system cable into a daisy-chain cable with SCSI PRO. This DB-25 (F) to Centronics-50 (M) adapter attaches to your system cable to make it a Centronics-50 (M/M) cable. Using SCSI PRO, you'll only need to carry one cable.

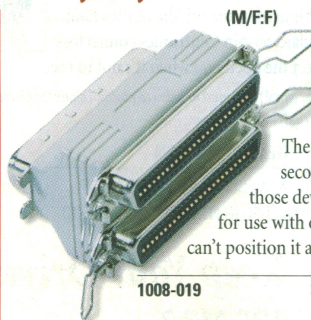


CAT. #	ITEM DESCRIPTION	PRICE
1008-015-999	APS SCSI DOC (WITH POWERMERGE LTD. ED.)	\$29.95
1008-016-999	APS SCSI PRO	19.95
100605	APS SCSI SET (DOC & PRO) WITH POWERMERGE LTD. ED.	34.95
APS ULTIMATE POWERBOOK CONNECTION KITS		
100606	(DOC, PRO & 25 x 25 CABLE WITH POWERMERGE LTD. ED.)	49.95
105283	(DOC, PRO & 25 x 50 CABLE WITH POWERMERGE LTD. ED.)	49.95

100607	APS POWERBOOK TO POWERBOOK CONNECTION KIT (2 SCSI DOCS & 25 x 25 CABLE WITH POWERMERGE)	64.95
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*In addition to SCSI DOC constraints, the APS PowerBook to PowerBook Connection Kit cannot be used to connect two IDE-based PowerBooks.

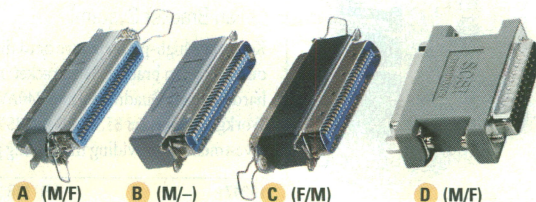
Perfect for devices with one SCSI port!



APS SCSI Splitter

The APS SCSI Splitter lets you add a second 50-pin Centronics SCSI port to those devices which provide only one. Ideal for use with our SR 1000 enclosure when you just can't position it at the end of the SCSI chain. (M/F:F)

1008-019	SCSI SPLITTER	\$19.95
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End That Cable Mess!

APS Power StackKIT

Eliminate that unruly nest of power cables behind your drives forever. You'll only need one power cable to run all of your drives in a stack of SR 2000 enclosures when you use the APS Power StackKIT with AC "T" power connectors. Only the bottom device in a stack needs a power cord, which feeds the entire stack. Used in conjunction with the APS StackKIT, the result is a sleek stack of devices, free of the tangled mess of cords typical of stacked drive chains. Made of durable molded plastic they're manufactured to exactly fit the dimensions of a stack of APS drives in SR 2000 enclosures. We recommend a maximum of four "PowerT" connectors on any one power cord.

CAT. #	ITEM DESCRIPTION	PRICE
105008	APS POWER STACKKIT - (2 AC POWER T CONNECTORS AND 1 PROTECTIVE ENDCAP)	\$14.95
105009	ADDITIONAL POWER T ADD-ON CONNECTOR	7.95

APS SCSI Conduit®

The best way to eliminate that jumble of SCSI cables and power cords behind your stack of APS drives is by using our exclusive cable management system, the APS SCSI Conduit. This family of products shortens your SCSI chain and shields it from performance hindering stray radiation and signal interference. These products are designed for use with SR 2000 equipped drives.

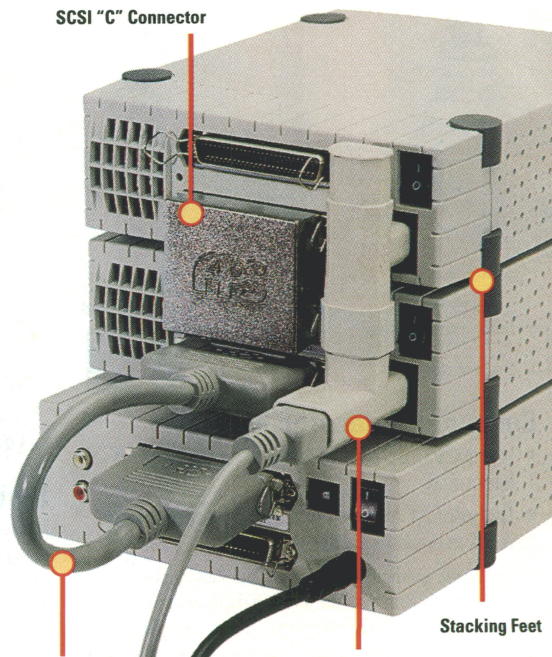
The original SCSI Conduit includes a SCSI "C" connector with 50-pin Centronics connections, a Power StackKIT, and four concave stacking feet for SR 2000 enclosures. Use the APS SCSI Conduit to stack SR 2000 external 3.5" SCSI hard drives as well as the APS 230 MO and APS HyperQIC drives.

SR 2000 equipped Fast / Wide 3.5" SCSI hard drives will need the "SCSI Conduit Wide" which includes a SCSI "C" Wide connector with 68-pin Fast / Wide connectors, a Power StackKIT, and four concave stacking feet.

For SR 2000 equipped drives using an external power supply such as the APS HyperDAT, APS HyperDAT Pro, APS 5.25" SyQuest drives, APS DAT, APS 2.6GB MO, APS PD4, APS CD-R and CD-ROM drives, use the StackKIT which includes a 50-pin Centronics SCSI "C" connector and four stacking feet. On the many non-SR 2000 external drive products, the 12" Mini SCSI Link is the perfect, short SCSI cable to shorten the SCSI chain.

CAT. #	ITEM DESCRIPTION	PRICE
105119	APS SCSI CONDUIT (W/50-PIN CONNECTOR, POWER STACKKIT, FEET)	\$29.95
101269W	APS SCSI CONDUIT WIDE (W/68-PIN CONNECTOR, POWER STACKKIT, FEET)	39.95
101269	STACKKIT (W/50-PIN CONNECTOR, FEET)	19.95
1007-004-001	MINI SCSI LINK (12", 50-PIN SCSI CABLE)	19.95

SCSI "C" Connector



Mini SCSI Link

Power StackKIT

SCSI Conduit® **\$29⁹⁵**
CAT. # 105119

The Ultimate Performance Tools!

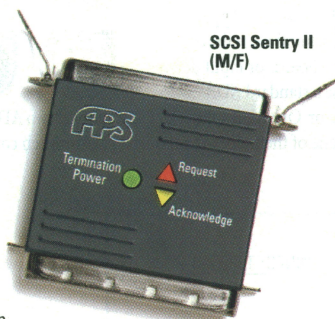
SCSI Sentry
(M/F)



U.S. Patent No. 05422580



SCSI Sentry II
(M/F)



SCSI Sentry®

Get all the benefits of our award-winning, patented Digital Active Termination technology in the form of an external SCSI performance-enhanced monitoring instrument. SCSI Sentry helps you eliminate those annoying termination problems and optimize the performance of your SCSI chain. It's particularly beneficial to scanners and other problem SCSI peripherals on SCSI chains with non-SR 2000 devices at the end. The optional SCSI Sentry power adapter provides SCSI Sentry with the proper termination power where needed. (Centronics-50M/Centronics-50F connectors)

CAT. #	ITEM DESCRIPTION	PRICE
1009-017	SCSI SENTRY	\$39.95
101173	SCSI SENTRY POWER ADAPTER	19.95

SCSI Sentry® II

SCSI Sentry II brings you all the features of the original SCSI Sentry and more, including the added benefit of a high-capacity auto-switching international power supply for those long, complex SCSI chains or chains without termination power, such as PC SCSI and portable computing environments. (Centronics-50M/Centronics-50F connectors)

CAT. #	ITEM DESCRIPTION	PRICE
1009-018	SCSI SENTRY II	\$69.95

BENEFITS	SCSI SENTRY	SCSI SENTRY II
Optimizes Overall SCSI Performance	✓	✓
Patented Digital Active Termination	✓	✓
Provides Ideal Transmission Power	✓	✓
Drastically Reduces SCSI Retries	✓	✓
Regulates SCSI Line Voltage	✓	✓
Solves Cable Impedance Issues	✓	✓
LED Active Indicators Diagnostic Tool	✓	✓
Easy Installation: Takes Seconds	✓	✓
Termination Power for Entire SCSI Bus	✓	✓
Self-Healing Fuse to Handle Power Overloads	✓	✓

"...when all was said and done, SCSI Sentry did its stuff. All the problems I have experienced became history...this device may well be the cure for your SCSI woes. Even if your SCSI setup is working OK, I heartily recommend SCSI Sentry as an extra ounce of protection."

-Macworld Magazine.

APS SCSI PowerPlug™

Adding, removing, or swapping SCSI devices in a chain has never been quicker or easier. Using the new APS SCSI PowerPlug, you can safely "hot swap" SCSI devices on your Mac. The time savings of hot swapping are immense. Using the APS SCSI PowerPlug and the included software control panel, users can add or remove a device in as little as 30 seconds compared to up to 10 minutes or more to power down, connect or remove a device, and power back up.

The APS SCSI PowerPlug comes in two versions: the APS SCSI PowerPlug II which lets you swap devices at the end of the chain and includes Digital Active Termination, and the unterminated APS SCSI PowerPlug NT which has a SCSI splitter device and is used in the middle of the chain. You can use as many as two APS SCSI PowerPlug NTs in a chain as

long as the chain is properly terminated by an APS SCSI PowerPlug II, an APS SCSI Sentry®, a DaTerm® equipped APS drive, or a passive terminator. Both APS SCSI PowerPlugs use standard 50-pin Centronics connectors and come with a rubber cap to protect the open end when it's not in use.

Please note: The hot swap process detailed in the control panel must be followed exactly. Failure to follow the instructions may result in system crashes, data corruption, or electrical circuitry damages.

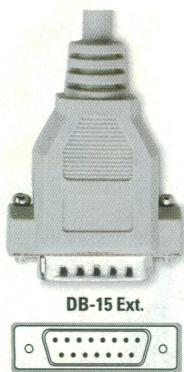
CAT. #	ITEM DESCRIPTION	PRICE
106448	APS SCSI POWERPLUG II (TERMINATED)	\$99.95
106449	APS SCSI POWERPLUG NT (NOT TERMINATED)	79.95



(M/F)

Specialty Cables

APS – Your Cable Source



DB-15 Ext.



ADB Ext.



AC Power Cord

Computer Extension Kit, M/F

- Move CPU up to 6' away from monitor and keyboard
- Includes AC power cord, DB-15 monitor and ADB extension cables

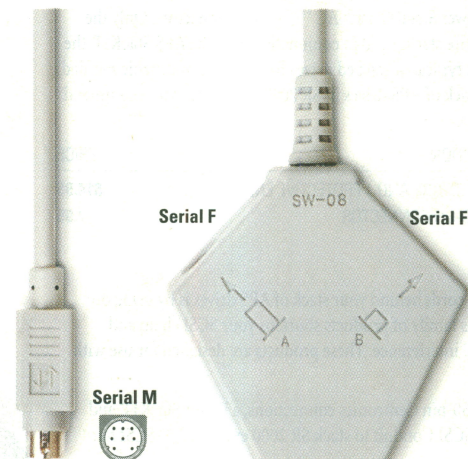
Arranging the equipment that sits on your desk can be a chore, especially with that Macintosh right there in your way. Our extension kit lets you move your CPU up to six feet away from your monitor and keyboard. The extension kit includes AC power cord, DB-15 monitor and ADB extension cables.

CAT. #	ITEM DESCRIPTION	PRICE
100635	EXTENSION KIT	\$24.95
1007-024-006	6' AC POWER CORD (ONLY)	3.95



Serial Printer Cable, M/M

Our 6' serial printer cable allows you to connect a Mac serial port to an Imagewriter II or StyleWriter.



Switch Cable, M/F/F

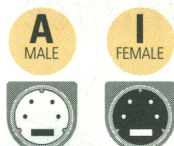
Now you can keep two serial devices connected to your PowerBook or other Mac serial port instead of constantly having to switch cables. With the push of a button, you can seamlessly switch between your printer and PaperPort scanner or other device. Not for use with Power Mac 7100. Serial M/F/F

1007-022	SWITCH CABLE	\$29.95
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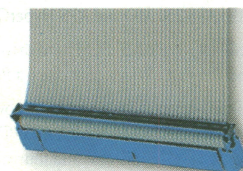
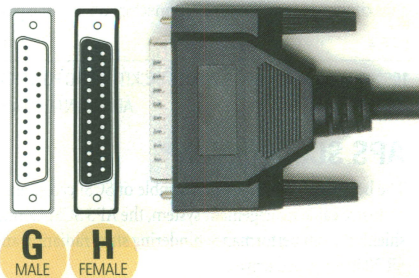
ADB Cables

Our ADB cable fits Apple keyboards and most third-party ADB keyboards or input devices that use a standard ADB connector. Our ADB splitter lets you connect two ADB devices when one of them doesn't support a pass-through connection.



PC Parallel Cable, M/F

The basic parallel/serial cable has 25 pins with a female and male connector.



APS SCSI 50-pin Ribbon Cables

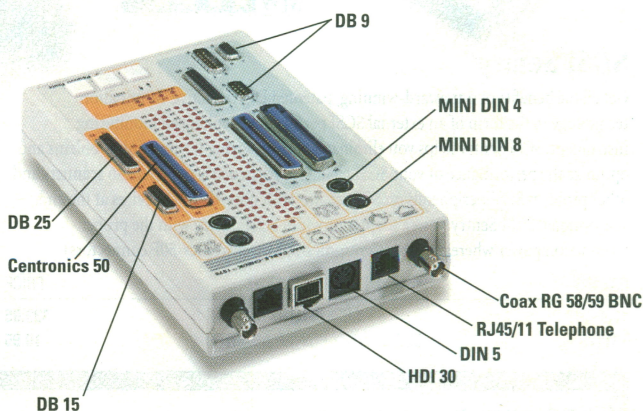
- High-quality 13" SCSI ribbon cable
- Stays pliable; won't crack

External cables aren't the only source of SCSI communication problems. Internal ribbon cables can be at fault, too. A high-quality 13" replacement cable from APS is perfect for restoring proper operation. This 50-pin cable is compatible with any Mac that is only capable of supporting one internal hard drive, including the SE, Mac II, IICx, IICi, IISI, the LC family, Centris / Quadra 610 and Quadra 700, among others. For Fast/Wide SCSI ribbon cable see the next page.

1007-025-013	50-PIN SCSI RIBBON CABLE	\$12.95
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Specialty Cables

CAT. #	ITEM DESCRIPTION	REFER TO ILLUSTRATIONS ON BOTH PAGES	CONNECT TYPE	1-2	3+
ADB Cables					
1007-006-006	6' STRAIGHT EXTENSION	A I	M/F	\$9.95	\$8.95
1007-013-006	COILED REPLACEMENT	A A	M/M	9.95	8.95
1007-019-006	SPLITTER	A I I	M/F, F	19.95	17.95
Parallel MobilStor/PC Cables					
1007-023-006	6' MOBILSTOR	G H	M/F	6.95	5.95
101911	6' PC PARALLEL BI-DIRECTIONAL	G J	M/M	5.95	4.95
Specialty Cables					
MODEM					
1007-009-006	25-pin to MINI DIN 8	C B	M/M	9.95	8.95
1007-012-006	6' SERIAL PRINTER	B B	M/M	9.95	8.95
106777	APPLE MONITOR TO M-POWER SYSTEM ADAPTER		F/M	9.95	8.95



Mac-Cable-Check™

Test all of your Mac cables for continuity and wiring configurations using Mac-Cable-Check. It helps you identify open, shorted, and cross connected wires, maps both ends of the cable, and includes a 9 volt battery and complete instructions.

Mac-Cable-Check tests cables with any combination of these standard connections:

Centronics 50 M/F	DB 25 Male	RG 58 / 59 BNC Coax
RJ11 / 45 Telephone	HDI 30	DB 9 M / F
MINI DIN 4/8 Male	DIN 5 Male	DB 15 M / F

106438	MAC-CABLE-CHECK*	\$159.95
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Insist on Premium APS SCSI Cables

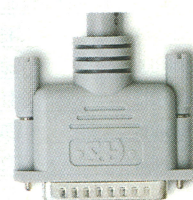
Cables

The most important, yet most often neglected parts of your SCSI chain are the cables. For the best data integrity and reliability, use only premium APS SCSI cables. Within a tough plastic sheath, these cables have paired, tightly-twisted 26-gauge conductors in an end-to-end foil shield and a fully-soldered heavy-duty tinned copper braid. The foil and copper braid are both

soldered around the entire diameter of the cable to the copper shield over the connector which is then fully-soldered to the steel connector hood. Inside the cable, you'll find a full-length tinned copper drain wire running from one connector hood to the other. Even the connector pins are premium, with gold plating on each pin.

All APS SCSI cables have a lifetime warranty!*

SCSI Cables		REFER TO ILLUSTRATIONS		CONNECT TYPE	1-2	3+
CAT. #	ITEM DESCRIPTION	ON BOTH PAGES				
	25 x 50					
	DB-25 to 50-pin Centronics			M/M		
1007-001-002	2'	C	D		\$19.95	\$17.95
1007-001-006	6'				25.95	23.95
	POWERBOOK 30 x 50					
	30-pin to 50-pin Centronics			M/M		
1007-003-002	2'	E	D		39.95	36.95
	50 x 50					
	50-pin Centronics to 50-pin Centronics			M/M		
103245	SCSI SHORT LINK 7"	D	D		5.95	4.95
1007-004-001	MINI SCSI LINK 12"				19.95	17.95
1007-004-003	3'				19.95	17.95
1007-004-006	6'				25.95	23.95
102386	12'	D	K	M/M	59.95	54.95
102387	12' Extension			M/F	59.95	54.95
	SCSI II CABLES (28-GAUGE)					
	Micro-50 to 50-pin Centronics	F	D	M/M		
1007-005-002	2'				39.95	36.95
1007-005-006	6'	F	C	M/M	49.95	45.95
	Micro-50 to DB-25					
1007-029-003	3'				25.95	23.95
1007-029-006	6'				29.95	27.95
	25 x 25					
	DB-25 to DB-25	C	C	M/M		
1007-002-003	3'				4.95	3.95
	FAST/WIDE SCSI CABLES (28-GAUGE)					
101930	3' Micro 68-pin to Centronics 50-pin	L	D	M/M	49.95	45.95
101931	3' Micro 68-pin to Micro 68-pin	L	L	M/M	59.95	53.95
101932	3' Micro 68-pin to Micro 50-pin	L	F	M/M	59.95	53.95
105300	18" Ribbon 68-pin, 3 head (Not shown)			M/M/M	24.95	23.95

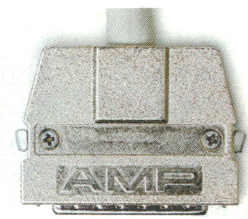


DB-25, M



Micro-SCSI 68-Pin, M

The Micro-SCSI 68-pin connector is for use with Fast/Wide drives and adapter/accelerator cards.



Micro-SCSI, M

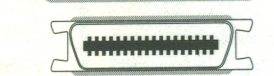
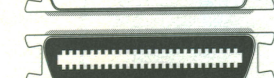
The Micro-SCSI connector works best with Mac peripherals, Adaptec micro-channel SCSI host adapters and SUN workstations.

30-Pin, M

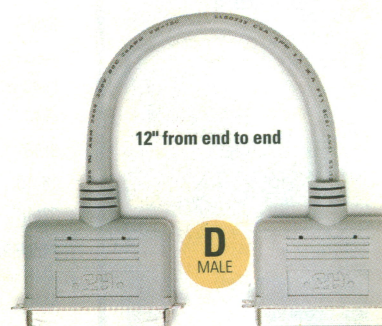
The 30-pin connector is used as the SCSI interface connector on PowerBook products from the 100 through the 180, including Duo Docks. All APS cables with the 30-pin PowerBook connector will have one pin missing. This is the proper configuration for use with an external SCSI device.



50 & 36-Pin Centronics, M



The 50-pin Centronics connector is the typical SCSI daisy chain connector.



APS Mini SCSI Link, M/M

At last! A premium quality short length SCSI cable (only 12") to help you minimize that cable mess - and overall SCSI chain length.



E MALE



Our Cables

APS' SCSI Cables

Connectors

Ours

Full copper shields circumferentially soldered to the heavy copper braid and to the connector's steel hood.

Connector Pins

Ours

Gold plating on all connector pins.

Gauge

Ours

Heavy, 26-gauge with 19 sets of tightly twisted copper data pairs.

Shielding

Ours

Full-length, heavy foil shielding and heavy-duty, fully soldered braid.

Sheathing

Ours

Industrial grade plastic sheathing.

All APS SCSI cables have a lifetime warranty!*

*Limited lifetime warranty includes cable replacement for defects or failure due to manufacture. Damage due to abuse or misuse is not covered. For complete information of this warranty, call our InfoFax Hotline at 800-374-5802.

Their Cables

Other SCSI Cables

Connectors

Theirs

Little or no shielding and no hood connection to the foil or braid.

Connector Pins

Theirs

Bare, base metal connector pins.

Gauge

Theirs

Lighter, 28- or 32-gauge with low copper content data lines and few twists. Often they use no pairing, just 25 light conductors.

Shielding

Theirs

Thin foil shielding with light steel braid mechanically fastened at each end.

Sheathing

Theirs

Cheap, lightweight plastic sheathing.

Jennifer On... 12' SCSI Extension Cable

While your human ears may not always pick it up, my ears, and my sensitive digital audio recording equipment, definitely tune into the hums and whirrs of SCSI peripherals. There's nothing worse than laying down a wicked Jazz riff while howling my lungs out, only to hear later that I was accompanied by the monotone buzz of some SCSI peripheral. That's why I swear by the 12' SCSI Extension Cable in my sound studio. It lets me move my drives far away from my microphones while recording, eliminating their sounds from my destined-for-gold tunes. If you happen to own a device with a particularly offensive noise, the 12' SCSI Extension Cable can be a real sanity-saver.



RAM

How to order SIMMs (RAM Modules)

Adding memory to a Mac is sometimes confusing. PCs and a few Mac models (those with parity checking) use nine-chip SIMMs (1 x 9 and 4 x 9). Most desktop Macintosh models use eight-chip SIMMs (1 x 8 and 4 x 8). New Macs typically use 72-pin SIMMs that can be added in variable increments, allowing for easier upgrading.

Our RAM pricing charts are based on memory upgrades for systems having factory installed RAM. If you already have additional RAM in your system and need more memory, you may be able to use some or all of your current memory as part of your upgrade. Keep in mind, often you may need to replace your existing SIMMs. If you have questions... simply call one of our sales experts at 800-374-5681 and they will help you find the right solution for your memory needs.

How much RAM? Here are the minimums, but recommended levels are higher in many cases.

Application	Min. RAM	Recommend RAM
Act! 2.0	2MB	8MB
ClarisWorks 3.0	1MB	8MB
Excel 5.0	6MB	8MB
Fax PRO	4MB	8MB
Illustrator 5.5	5MB	12MB
MS Office 4.2	8MB	12MB
PageMaker 5.0	8MB	12MB
Photoshop 3.0	16MB	32MB
PowerPoint 4.0	6MB	12MB
System 7.5	8MB	12MB
QuarkXPress 3.3	5MB	12MB
QuarkXPress 3.3 Power Mac	8MB	16MB
Word 6.0	4MB	8MB

Remember you can't have too big of a hard drive and you can't have too much RAM!

APS does not support the installation of RAM. We recommend having an Apple certified technician install the RAM.
No credits or refunds on RAM purchases. Defective RAM will be replaced with like capacity RAM after defects have been certified by APS. RMA required.

PowerBook Memory*

SIMM SIZE	CAT. #	PRICE
POWERBOOK 1400 (8MB soldered on motherboard; 4MB or 8MB standard in 1st slot.) Stackable upgrades - 2 modules max. - for 2nd slot.		
4MB	1026-086-004	\$49.95
8MB	1026-086-008	80.95
12MB	1026-086-012	111.95
16MB	1026-086-016	120.95
24MB	1026-086-024	172.95
POWERBOOK 5300 (8MB soldered on motherboard)		
4MB	1024-067-004	\$53.95
8MB	1024-067-008	81.95
16MB	1024-067-016	144.95
32MB	1024-067-032	259.95
POWERBOOK 520, 520C, 540, 540C (4MB soldered on motherboard)		
4MB	1026-058-004	58.95
8MB	1026-058-008	81.95
16MB	1026-058-016	148.95
32MB	1026-058-032	288.95
POWERBOOK 190 (4MB soldered on motherboard)		
4MB	1026-073-004	53.95
8MB	1026-073-008	81.95
16MB	1026-073-016	144.95
32MB	1026-073-032	259.95
POWERBOOK 165C, 180C (4MB soldered on motherboard)		
4MB	1026-050-004	144.95
6MB	1026-050-006	219.95
8MB	1026-056-008	288.95
10MB	1026-056-010	344.95
POWERBOOK 160, 165, 180 (4MB soldered on motherboard)		
4MB	1026-054-004	144.95
6MB	1026-054-006	217.95
8MB	1026-054-008	282.95
10MB	1026-054-010	328.95
POWERBOOK 140, 145, 170 (2MB soldered on motherboard)		
2MB	1026-044-002	81.95
4MB	1026-044-004	144.95
6MB	1026-044-006	206.95
POWERBOOK DUO 2300 (8MB soldered on motherboard)		
4MB	1026-060-004	81.95
8MB	1026-060-008	114.95
12MB	1026-060-012	145.95
20MB	1026-060-020	259.95
48MB	1026-060-048	374.95
POWERBOOK 150, DUO 210, 230, 250, 270C, 280, 280C (4MB soldered on motherboard)		
4MB	1026-060-004	81.95
8MB	1026-060-008	114.95
12MB	1026-060-012	145.95
20MB	1026-060-020	259.95

*PowerBook 150 requires a memory upgrade adapter, CAT. # 100569, \$15.95

RAM market prices are extremely volatile, changing as often as several times each day. Please call us at 800-374-5681 for the latest prices.

How to read this chart for Macintosh and Power Mac memory:

Step 1 - Find your CPU in the first column.

Step 2 - Choose the appropriate amount of memory you wish to upgrade to from the second column.

Step 3 - Based on the amount of RAM you wish to add, order the quantity found in column three of each catalog number listed in the fourth column.

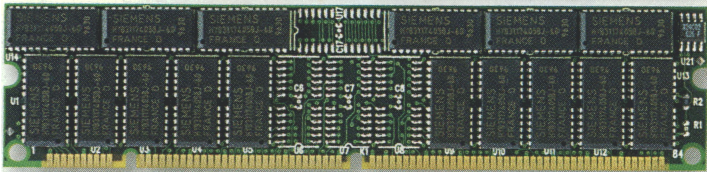
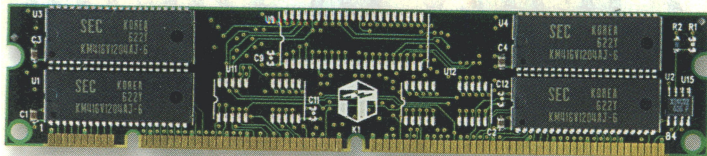
Example: If you want to upgrade your Quadra 950 to 64MB of RAM, you would order 4 each of catalog number 1024-038-016.

Macintosh Memory*

YOUR CPU	EXPAND RAM TO	ORDER THIS QUANTITY	OF CATALOG NUMBER	YOU WILL RECEIVE THESE SIMMS	YOUR TOTAL PRICE
PERFORMA 6300 SERIES - 0MB on motherboard, ships with 1-16MB SIMM					
	20MB	1	1024-002-004	1-4MB	\$23.95
	24MB	1	1024-002-008	1-8MB	41.95
	32MB	1	1024-002-016	1-16MB	93.95
	48MB	1	1024-002-032	1-32MB	186.95
	64MB	2	1024-002-032	2-32MB	373.90
<i>Performa 6300 Series computers have 2 SIMM slots</i>					
PERFORMA 6200, 5200 SERIES - 0MB on motherboard, ships with 1-8MB SIMM					
	12MB	1	1024-002-004	1-4MB	23.95
	16MB	1	1024-002-008	1-8MB	41.95
	24MB	1	1024-002-016	1-16MB	93.95
	40MB	2	1024-002-016	2-16MB	187.90
	40MB	1	1024-002-032	1-32MB	186.95
	72MB	2	1024-002-032	2-32MB	373.90
<i>Performa 6200, 5200 Series computers have 2 SIMM slots</i>					
PERFORMA 6100 SERIES - 8MB on motherboard					
	16MB	2	1024-002-004	2-4MB	47.90
	24MB	2	1024-002-008	2-8MB	83.90
	40MB	2	1024-002-016	2-16MB	187.90
	72MB	2	1024-002-032	2-32MB	373.90
<i>Performa 6100 Series computers have 2 SIMM slots; upgrade SIMMs in pairs</i>					
PERFORMA 600, 600CD - 4MB on motherboard					
	20MB	1	1024-026-016	4-4MB	124.95
	68MB	1	1024-026-064	4-16MB	575.95
PERFORMA 430, 410, 405, 400, 200 SERIES - 4MB on motherboard					
	10MB	2	1024-022-008	2-4MB	62.95
<i>Physically upgrade these CPUs to 12MB although only 10MB is addressable</i>					
QUADRA 900/950 - 0MB on motherboard					
	4MB	1	1024-038-004	4-1MB	55.95
	8MB	2	1024-038-004	8-1MB	111.90
	12MB	3	1024-038-004	12-1MB	167.85
	16MB	4	1024-038-004	16-1MB	223.80
	32MB	2	1024-038-016	8-4MB	249.90
	48MB	3	1024-038-016	12-4MB	374.85
	64MB	4	1024-038-016	16-4MB	499.80
<i>Quadra 900/950 have 16 SIMM slots; upgrade 4 SIMMs at a time</i>					
QUADRA 800 - 8MB on motherboard					
	12MB	1	1024-036-004	1-4MB	25.95
	16MB	1	1024-036-008	1-8MB	41.95
	24MB	1	1024-036-016	1-16MB	93.95
	40MB	1	1024-036-032	1-32MB	190.95
<i>QUADRA 800 has 4 slots that allows you to use any combination of sizes of 72-pin SIMMs</i>					
MACINTOSH LC 630, 575, 550, 520, 475, LC III - 4MB on motherboard					
	8MB	1	1024-068-004	1-4MB	23.95
	12MB	1	1024-068-008	1-8MB	41.95
	20MB	1	1024-068-016	1-16MB	93.95
	36MB	1	1024-068-032	1-32MB	186.95

Please call for RAM configurations for earlier Macintosh models, or for configurations not listed

1-800-374-5681



Power Mac Memory*

DIMMs*		
POWER MAC 7200, 7500, 7600, 8500, 9500, POWERWAVE 604, POWERCENTER, POWERTOWER, DAYSTAR GENESIS MP, UMAX SUPERMAC* S900		
DIMM SIZE	CATALOG NUMBER	PRICE EACH
4MB	1024-070-004	\$44.95
8MB	1024-070-008	51.95
16MB	1024-070-016	89.95
32MB	1024-070-032	194.95
64MB	1024-070-064	374.95

YOUR CPU	EXPAND RAM TO	ORDER THIS QUANTITY	OF CATALOG NUMBER	YOU WILL RECEIVE THESE SIMMS	YOUR TOTAL PRICE
POWER MAC 6100 – 8MB on motherboard					
	16MB	2	1024-002-004	2-4MB	\$47.90
	24MB	2	1024-002-008	2-8MB	83.90
	40MB	2	1024-002-016	2-16MB	187.90
	72MB	2	1024-002-032	2-32MB	373.90

Power Mac 6100 has 2 slots that allow you to install 72-pin SIMMs in pairs

POWER MAC 7100 – 8MB on motherboard					
	16MB	2	1024-002-004	2-4MB	47.90
	24MB	2	1024-002-008	2-8MB	83.90
	32MB	1	1024-002-024	2-4MB/2-8MB	129.95
	40MB	2	1024-002-016	2-16MB	187.90
	56MB	1	1024-002-048	2-8MB/2-16MB	269.95
	72MB	2	1024-002-032	2-32MB	373.90
	88MB	1	1024-002-080	2-8MB/2-32MB	455.95
	136MB	4	1024-002-032	4-32MB	747.80

Power Mac 7100 has 4 slots that allow you to install 72-pin SIMMs in pairs

POWER MAC 8100 – 8MB on motherboard					
	16MB	2	1024-002-004	2-4MB	47.90
	24MB	2	1024-002-008	2-8MB	83.90
	32MB	1	1024-002-024	2-4MB/2-8MB	129.95
	40MB	2	1024-002-016	2-16MB	187.90
	56MB	1	1024-002-048	2-8MB/2-16MB	269.95
	72MB	2	1024-002-032	2-32MB	373.90
	88MB	1	1024-002-080	2-8MB/2-32MB	455.95
	136MB	4	1024-002-032	4-32MB	747.80
	200MB	6	1024-002-032	6-32MB	1,121.70
	264MB	8	1024-002-032	8-32MB	1,495.60

Power Mac 8100 has 8 slots that allow you to install 72-pin SIMMs in pairs

POWER COMPUTING POWER 120, 100 – 8MB installed					
	16MB	2	1024-002-004	2-4MB	47.90
	24MB	2	1024-002-008	2-8MB	83.90
	32MB	1	1024-002-024	2-4MB/2-8MB	129.95
	40MB	2	1024-002-016	2-16MB	187.90
	72MB	2	1024-002-032	2-32MB	373.90
	88MB	1	1024-002-080	2-8MB/2-32MB	455.95
	136MB	4	1024-002-032	4-32MB	747.80
	200MB	6	1024-002-032	6-32MB	1,121.70

Power 120 and 100 have 6 slots that allow you to install 72-pin SIMMs in pairs

*No 30-day money-back guarantee or price protection on RAM products. All RAM sales final. Defective RAM will be replaced by APS with identical capacity and configuration RAM. Defects must be verified by APS prior to replacement. RMA required.



RAM

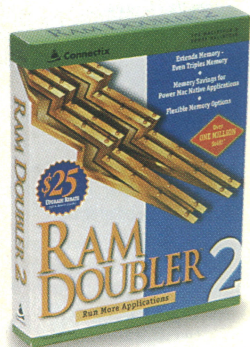
M-POWER Memory*

DIMM SIZE	CATALOG NUMBER	TOTAL PRICE
M-POWER 603e 160, M-POWER 603e 200, M-POWER 604e 200 – M-POWER CPUs have three, EDO DIMM slots where you may install 3.3V EDO DIMMs one at a time. Slots 2 and 3 can accept up to a 64MB DIMM, and slot 1 can accept up to a 32MB DIMM.		
3.3V EDO DIMMs		
8MB	1024-080-008	\$89.95
16MB	1024-080-016	170.95
32MB	1024-080-032	324.95
64MB	1024-080-064	628.95
VRAM DIMMS – M-POWER CPUs require either a minimum of 1MB of VRAM or a graphics card.		
1MB	1024-082-001	86.95
2MB	1024-082-002	189.95
4MB	1024-082-004	329.95
LEVEL 2 CACHE DIMMS		
256KB	1024-084-256	89.95
512KB	1024-084-512	149.95

Connectix RAM Doubler™ 2

Install RAM Doubler 2 on your Mac and you won't need to spend all of your time opening and closing applications because you don't have enough memory. RAM Doubler 2 triples the amount of RAM that's available, allowing you to run more applications. If you're using a Power Mac, RAM Doubler 2's Power Mac File Mapping reduces memory requirements from native applications, keeping more RAM available. RAM Doubler 2 requires a Macintosh with a 68030 or greater processor and at least 8MB of RAM.

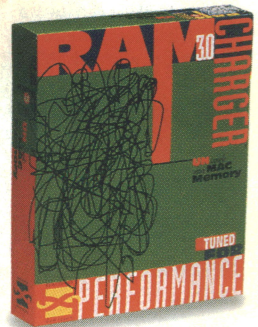
106474 RAM DOUBLER 2* \$59.95



Synchronys RAM Charger 3.0

This easy-to-use RAM management software doesn't just give you more available RAM, it makes your existing RAM more stable and reliable. After you install the software, it automatically optimizes your applications for use. When you open an application, it will initially require less RAM, and as the demands of that program grow while you work, Synchronys RAM Charger will allocate more memory to that application so you can complete the task. When you're using multiple applications simultaneously, the software lets each application start with minimal RAM requirements. Then, the pool of available free RAM is allocated to the programs and tasks that are in use. Synchronys RAM Charger works with all Macs running System 7 or later from the Mac Plus to the Power Macs.

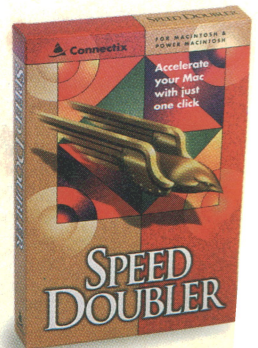
106486 SYNCRONYS RAM CHARGER 3.0* \$39.95



Connectix Speed Doubler

This is the must-have utility for all serious Power Macintosh users. Speed Doubler will double the performance of non-native applications running in emulation mode. Even if you only run native Power Mac applications, a significant portion of the Power Mac System software is still non-native. Speed Doubler will accelerate those functions giving you faster disk access, quicker Finder functions and overall improved application performance to make you more productive.

105179 SPEED DOUBLER* \$57.95



Keep Plenty of Blank

(Glossary Continued from page 23)

allows all platter surfaces to be used for data. Each platter has some capacity taken up by servo information, but the net result is greater storage capacity with the same number of platters.

Fast ATA: a revision of the ATA (IDE) specification which allows for faster data transfer rates. Both the adapter and the device must support Fast ATA or the transfer will be in the slower mode.

Fast SCSI: a revision of the SCSI specification that doubles the transfer rate on the SCSI bus. Both the adapter and the device must support Fast SCSI or the transfer will be in the slower mode. Fast SCSI and Wide SCSI are often, though not always implemented together.

Formatted Capacity: the capacity of a drive after it is formatted for a particular type of computer or computer system. Because of the different operating systems requirements, the formatted capacity of a drive may vary by dozens or hundreds of megabytes from one computer system and another (type).

Hard Disk, Drive, Hard Disk Drive (HDD): a device which consists of a housing, a motor, a recording and play-back mechanism, and one or more fixed, rigid rotating recording surfaces. The data is stored magnetically on one or both sides of the disk.

Jennifer: a clever Airedale or a blond telemarketing mascot, depending on which catalog you use...

MTBF or Mean Time Between Failure: a statistical term relating to reliability as expressed in power on hours (p.o.h.). It was originally developed for the military and can be calculated several different ways, yielding substantially different results. It is common to see MTBF ratings between 300,000 and 1,000,000 hours for hard disk drive mechanisms, which might lead you to conclude that the specification promised between 30 and 100 years of continuous operation. This is not the case! The specification is based on a large (statistically significant) number of drives running continuously at a test site. Based on the observed error rate over a few weeks or months, the MTBF is extrapolated. MTBF is not representative of how long your drive, or any individual drive is likely to last, nor is it a warranty. It is representative of the relative reliability of a family of

(Continued on page 32)

30

800-374-5681
24 Hours a Day, 7 Days a Week



3M Travan™ Tape Minicartridge

Let the reliability of Travan Technology safeguard your data. It's based on QIC technology, but uses a unique minicartridge design that lets it use a longer tape to give you improved backup and archival capacity. You can fit 400MB of data on a TR-1 minicartridge, 800MB on a TR-2, 1.6GB on a TR-3, and 4GB on a TR-4 minicartridge.

CAT. #	ITEM DESCRIPTION	PRICE
1017-800	TRAVAN TR1	\$29.95
105016	TRAVAN TR2	32.95
105017	TRAVAN TR3	34.95
106150	TRAVAN TR4	36.95

NEW LOW PRICE



CD-R (CD Recordable) Media

Recordable CD (CD-R) is a terrific storage media for audio, video, graphics, and text files. The CD-R media is perfect when quick turnaround or low volume distribution of large amounts of data is needed. Each 74-minute CD-R disc stores up to 650MB of data on compact, reliable media, and you'll have rapid random access to your data.

CAT. #		1-9	10+
74-MINUTE CD-R (650MB)†			
1017-650	3M	\$10.95	\$9.95
105212	MAXELL	9.95	8.95
105167	SONY	10.95	9.95

Fuji 74-Minute CD-R Media 10-Pack†

CAT. #	PRICE	MAIL IN REBATE	FINAL PRICE
105297	\$94.95	— \$25.00	\$69.95

*Final Price reflects a rebate direct from Fuji. Details on the package. Limit 2 per name. Rebates expire on 6/30/97.
†APS 30-day money-back guarantee not applicable. Product covered by manufacturer's warranty



Fuji 3.5" MO Media with Rebates

Save \$15 on each Fuji 128 or 230 MO media 3-pack you purchase with a mail-in rebate direct from Fuji.

NEW LOW PRICE

CAT. #	ITEM DESCRIPTION	PRICE	MAIL-IN REBATE	FINAL PRICE*
105214	128 MO 3-PACK	\$59.95	—\$15.00	\$44.95
105215	230 MO 3-PACK	79.95	—\$15.00	64.95

*Final Price reflects a rebate direct from Fuji. Details on the package. Limit 2 per name. Rebates expire on 6/30/97.

Magneto-Optical Media

Magneto-optical (MO) media is a convenient, reliable storage solution for graphics professionals and others needing high-capacity, near-line storage. In the production of this catalog, we send all of our text and image files to our printer on three 1.3GB MO cartridges. The printer then generates plates directly from the data on the MO media.

SIZE	BRAND	CAT. #	1-4	5+
3.5" 128MB	MAXELL	1018-128	\$16.95	\$14.95
	SONY	1021-128	18.95	16.95
	3M	1017-128	26.95	24.95
3.5" 230MB	MAXELL	1018-230	24.95	22.95
	SONY	1021-230	22.95	20.95
	3M	1017-230	33.95	31.95
3.5" 540MB	SONY	106621	46.95	44.95
3.5" 640MB	SONY	106626	46.95	44.95
5.25" 1.3GB	MAXELL	1018-001	68.95	66.95
	SONY	1021-001	68.95	66.95
	3M	1017-001	72.95	70.95
5.25" 2.3 GB	SONY	106627	89.95	87.95
5.25" 2.6GB	3M	106148	98.95	96.95
	MAXELL	106559	96.95	94.95
	SONY	106623	96.95	94.95

NEW LOW PRICE

5-Pack ZIP Media



Special offer on 5-packs of Fuji brand media for Iomega's Zip drive, makes it easy to keep plenty of these removable cartridges on hand to tackle any storage chores you may have.



CAT. #	ITEM	PRICE	MAIL-IN REBATE	FINAL PRICE*
106593	ZIP 5-PACK	\$79.95	—\$10.00	\$69.95

*Final Price reflects a rebate direct from Fuji. Details on the package. Limit 2 per name. Rebates expire on 6/30/97.

Iomega® Jaz Media



Delivering up to 1GB of capacity on each removable cartridge, Jaz media is ideal for transporting large files, running multimedia applications, and even backing up other data storage devices.



CAT. #	ITEM DESCRIPTION	PRICE
103272	1GB JAZ CARTRIDGE	\$89.95

NEW LOW PRICE

Media on the Shelf!

Tape Media



SONY

As a pioneer and developer of 4mm and 8mm magnetic tape as well as the heads to read and write them, Sony is in a unique position to bring you unparalleled reliability in magnetic tape media. Sony's tape products come in an electrostatic shell and are recognized universally as a premier magnetic tape.



maxell

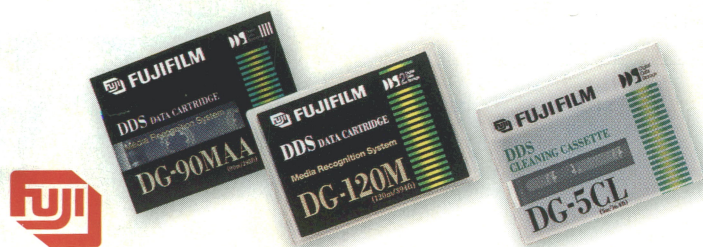
Maxell is an industry leader in magnetic tape technology, employing a patented ceramic coating on the metal particles of their 4mm and 8mm tape cartridges. This special coating protects your data's integrity from heat, humidity and the effects of oxidation.



IMATION

Borne of 3M Innovation

Imation, formerly 3M, works closely with many of the major tape drive manufacturers to ensure that the tape you use consistently meets or exceeds the drive manufacturer's specifications.



Recognized for excellent signal retention, high output, low error rates, and terrific durability, Fuji media is an outstanding choice for any data storage application. Every piece of Fuji media from 4mm and 8mm tapes to optical media takes advantage of Fuji's magnetic and film coating expertise.

DATA (QIC,TEAC) CARTRIDGES

MEDIA	BRAND	CAT. #	1-3	4+
DC-2120	SONY	1021-212	\$13.95	\$12.95
DC-2120	3M	1017-212	12.95	11.95
DC-6150	3M	1017-615	13.95	13.45
QW-3020XLF	SONY	1021-907	29.95	27.95
QW-3080XLF	SONY	1021-308	31.95	30.45
CS-600XD 155MB	MAXELL	1018-155	16.95	15.45
CS-600SX 600MB	MAXELL	1018-600	26.95	25.45

4 MM (DAT) & 8 MM TAPE CARTRIDGES

SIZE	BRAND	CAT. #	1-3	4+
60M DAT	MAXELL	1018-060	\$7.95	\$6.95
	SONY	1021-060	7.95	6.95
	3M	1017-060	7.95	6.95
90M DAT	MAXELL	1018-090	8.95	7.95
	SONY	1021-090	8.95	7.95
	3M	1017-090	8.95	7.95
5PK 90M W/\$10 REBATE*	FUJI	105216	45.95	45.95
3PK 90M W/CLEANER	FUJI	105217	29.95	28.95
120M DAT (DDS-2)	MAXELL	1018-120	21.95	19.95
	SONY	1021-120	21.95	19.95
	3M	105003	29.95	27.95
	FUJI	105291	21.95	19.95
HS8/112 (8MM)	MAXELL	1018-112	7.95	6.95
	SONY	1050101	8.95	7.95
	3M	1017-112	8.45	7.45
HS8/160 (8MM)	MAXELL	105039	15.95	15.45
	3M	106399	16.95	16.45

*Price reflects a rebate direct from Fuji. Details on the package. Rebates expire on 6/30/97. Proof of purchase required.

Save Your Data By Backing Up, Save Your Drive By Keeping It Clean!

The #1 reason a tape drive fails is dirty heads. You must regularly clean your tape drive to protect your hardware investment and your precious data. Dirty heads can result in damaged or corrupted data, deteriorating drive performance, and drive failure. Regular cleaning is an inexpensive insurance policy against premature drive failure. For your DAT or DLT drive, simply insert a cleaning cartridge, and it automatically runs a cleaning cycle. Each DAT or DLT cleaning cartridge will last for 20 to 30 uses. You should never rewind or reuse a cleaning cartridge. Some minicartridge drives use a cleaning kit with a cartridge and a special cleaning brush. Just load the cartridge, insert the cleaning brush into the cartridge, turn the brush, remove it, and you're done. Your drive should be cleaned immediately after you purchase it, after its first two hours of use and every time you use a new tape. Then you'll just need to clean it after every additional eight to 10 hours of use - more frequently if you operate the drive in a dusty area.



Head Cleaners

CAT. #	ITEM DESCRIPTION	1-3	4+
1021-902	(SONY) DAT	\$14.95	\$13.95
101574	(3M) DAT	13.95	12.95
1018-902	(MAXELL) DAT	12.95	11.95
106619	(SONY) 8MM	26.95	24.95
1019-907-008	DLT CLEANING CART.	49.95	47.95
106628	(SONY) 3.5" MO	34.95	32.95

3M Minicartridge Drive Cleaning Kit



The 3M Minicartridge Drive Cleaning Kit is a three-way cleaning solution for your Travan, DC2000, and MC3000 minicartridge drives. The cleaning kit includes the positioning

cartridge, blower brush, 20 cleaning wands with a pre-measured amount of isopropyl alcohol cleaning solution, and instructions for use. It is enough for 10 cleaning applications, and replacement wands are available when the original supply is depleted.

CAT. #	ITEM DESCRIPTION	PRICE
105294	3M MINICARTRIDGE DRIVE CLEANING KIT	\$19.95
1017-904-001	10 REPLACEMENT CLEANING WANDS	14.95

Media

(Glossary Continued from page 30)

mechanisms. A higher MTBF suggests a more reliable and robust family of mechanisms.

Narrow SCSI: non-wide SCSI devices and adapters. They use 8-bit transfers and allow only seven devices per bus (plus one host). Until the advent of Wide devices and adapters, all SCSI was narrow.

Near-line Storage: data accessible by the computer but not currently on-line. Near-line data can be brought on-line by the computer if the data is requested. MO libraries and (and some tape) jukeboxes are near-line storage devices. It is typically slower than on-line storage.

NuBus: expansion card interface architecture used in many Macintosh models.

Off-line Storage: stored data electronically inaccessible by the computer. Off-line storage must be placed near- or online before it can be accessed.

Online Storage: data stored on mounted drives or devices. On-line data is typically easily and quickly accessed.

Operating System (OS): the set of programs and commands that allow a computer to boot up and run applications. See System.

Partition: specific sections created on a formatted disk upon which data can be stored. The process of dividing up a formatted hard disk into these sections or volumes is called partitioning.

PCI (Personal Computer Interface): an expansion card interface used in Macintosh and IBM compatible computers. PCI is very fast compared to NuBus

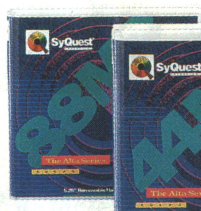
Price Per Megabyte: calculated for hard drives by dividing the price of the internal version of the drive by the formatted capacity in megabytes.

PRML (Partial Response Maximum Likelihood): a technique used in the read channel of a hard disk drive allowing the reduction of crosstalk and overlap leading to increased track (data) densities. PRML channels allow for about a 25% greater data density.

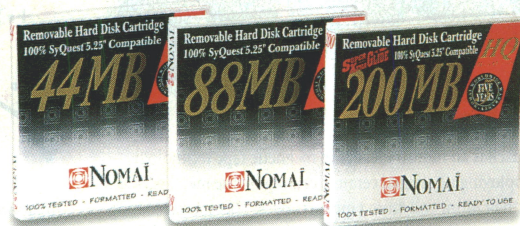
QIC (Quarter Inch tape): a common format for magnetic tapes used in computer data backup.

QIC-Wide: a version of the QIC standard that uses 8mm (0.31 inches) tape. The increased tape width allows for additional data tracks.

(Continued on page 38)



CAT. #	ITEM DESCRIPTION	PRICE
	MAC FORMATTED	
1022-044-006-3	SQ-400 (44MB)	\$59.95
1022-088-006-3	SQ-800 (88MB)	64.95
1022-200-006-3	SQ-2000 (200MB)	94.95



Removable Hard Cartridges are 100% SyQuest 5.25" compatible.

CAT. #	ITEM DESCRIPTION	1-4	5+
	MAC FORMATTED		
106587	44MB	\$44.95	\$39.95
106588	88MB	49.95	44.95
106589	200MB	79.95	74.95
106631	270MB	49.95	47.95



Imation Diskette 10 Packs

CAT. #	ITEM DESCRIPTION	PRICE
101572	3.5" DS-HS MAC FORMATTED	\$4.95
101573	3.5" DS-HS IBM FORMATTED	5.95



Maxell Mac Formatted Diskettes

CAT. #	ITEM	PRICE	MAIL-IN REBATE	FINAL PRICE*
106368	50-PACK BOX	\$24.95	-\$15.00	\$9.95
106369	100-PACK BOX	44.95	-\$30.00	14.95

*"Final price" reflects a rebate directly from Maxell. Rebate coupon and details on the package. Rebates expires on 6/30/97. Proof of purchase is required.



IMATION

Borne of 3M Innovation

PD650 Optical Disks

Get the best from your PD drive by using reliable PD media for removable data storage, backups and near-line archives of old image and database files. The media uses a new non-magnetic optical data storage technology to store up to 650MB on each cartridge. PD cartridges are compatible with all standard PD drives including the APS PD4.

105202	3M PD650	\$49.95
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Fuji DLT Cartridges

CAT. #	ITEM DESCRIPTION	PRICE
106191	FUJII DLT III(TK 85) MEDIA	\$45.95
106192	FUJII DLT IV(TK 88) MEDIA	109.95



Apple Notebook Disks (10-Pack)

Apple Notebook Disks are high-performance HD disks, precision-crafted to strict Apple factory standards.

101664	APPLE DISKS	\$9.95
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LabelOnce™ Reusable Media Labels

Finally, you can erase or edit label text anytime and never change labels. It's simple with LabelOnce, the fast, easy, environmentally friendly alternative to layers and layers of standard paper labels. LabelOnce works with a permanent, oil based felt tip marker that writes

smoothly and dries quickly. To erase or revise text, just use the non-smear vinyl eraser. No more messy changes, discarding old labels, and buying new ones. A LabelOnce label can be used over and over again, dozens of times and still look like new.

Before



Messy, marked up labels are the norm because you've got better things to do than replace old labels with new ...

After



LabelOnce label can be written on with an ink marker and erased with a white vinyl eraser hundreds of times.

CAT. #	ITEM DESCRIPTION	QTY.	PRICE
100383	DAT STARTER	10	\$8.95
100378	SYQUEST 3.5" STARTER	10	8.95
100387	SYQUEST 5.25" STARTER	5	8.95
100376	3.5" DISK STARTER KIT	25	8.95
106640	JAZ STARTER KIT	5	NEW 8.95
(Starter Kits include pen and eraser)			
100377	SYQUEST 3.5" REFILL	20	6.95
101303	3.5" DISKS REFILL	50	6.95
100382	DAT TAPE REFILL	20	6.95
106657	JAZ REFILL	10	NEW 6.95

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2. Go to electronic order form.
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4. We cannot guarantee the security of transactions on the Internet. Please exercise caution.

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1. Complete this order form and mail to address in bottom right corner.

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2. Be sure to include all of the following: billing address, telephone number, shipping address, credit card number and expiration date, bank name, 4 digit code on AMEX, the items you wish to order with quantity desired, and shipping method.
3. We cannot guarantee the security of transactions via E-mail. Please exercise caution.

Fax: (816) 483-3077

International: (816) 920-4109

SHIP TO:	CUSTOMER #			
	NAME		COMPANY	
	ADDRESS (Street address for UPS delivery)			
	CITY	STATE	COUNTRY	ZIP
	TELEPHONE (Day)		(Evening)	(FAX)

BILL TO:	NAME (AS IT APPEARS ON YOUR CREDIT CARD)		COMPANY	
	ADDRESS (WHERE YOU RECEIVE YOUR CREDIT CARD STATEMENTS)			
	CITY	STATE	COUNTRY	ZIP
	TELEPHONE (Day)		(Evening)	(FAX)
	(In case we need to contact you about your order)			

Page No.	Catalog No.	Computer Type	Cable		Description	Color	Qty.	Unit Price	Amount
6	2154-002	Power Mac 7600/120	25 x 50	50 x 50	APS Q 2100 (SCSI) external		1	\$449.95	\$449.95

PAYMENT

- ☐ Check or Money Order ☐ American Express
☐ Visa, MasterCard ☐ Discover

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AMEX 4-Digit Code



AMEX: You must submit the 4-digit ID code printed on the face of your card in order for your purchase to be authorized.

If credit card statement address is different than "Ship To" please complete "Bill To" information above.

Credit Card No.	Exp. Date	Month	Year

Bank Name (Visa, MasterCard)

Signature of Card Holder

TAX: Orders being shipped to Missouri addresses must add 6.475% sales tax.

Subtotal

Shipping

Sales Tax

Total Enclosed

RETURNS & EXCHANGES: APS brand products and certain designated third-party manufactured products may qualify for a 30-day money back guarantee, subject to the terms and conditions listed below.

TERMS AND CONDITIONS:

1. Prior to returning ANY product, you must obtain a return merchandise authorization (RMA) number from an APS Customer Service representative. Your APS Customer Service representative can help you determine if your product qualifies for a 30-day money back guarantee. Please have the following information available when calling 800-874-1427 for an RMA number: customer name; invoice number; serial number; and the nature of the problem.
2. APS brand drive products carry a disk-for-disk repair or replacement warranty. Drive and tape product warranties are listed with each product. All warranty service is factory service.
3. Products qualifying for return under the 30-day money-back guarantee MUST be received within 30 days from the original invoice ship date. The product must be returned complete, in resalable condition, and must include original packing materials, manuals, blank warranty cards, and all other accessories. Restocking fees of up to 100% of the original purchase price will be applied if the product, accessories, or packaging are damaged, missing or in non-saleable condition.
4. APS M•Power™ computer systems have a limited one-year factory warranty. APS M•Power computer systems do not come with a 30-day money-back guarantee.
5. For non-APS brand products such as books, cards, cameras, compact discs, electronic devices, furniture, media, modems, printers, RAM, scanners, software and other listed products, the APS 30-day money-back guarantee does not apply. These products are covered by the manufacturer's warranty. All non-defective returns for credit or exchange are subject to a 30% restocking fee.

PRICING: All prices and specifications are listed individually with each product. All prices and specifications are subject to change without notice. Prices are in U.S. dollars.

U.S. SHIPPING ONLY. Call for a shipping quotation outside the contiguous 48 U.S. states. The actual shipping charges will be added to your order.

UPS GROUND	2nd Business Day	Next Business Day	Next Business A.M.
For orders of:	COD: Add \$10 Additional		
\$0 - \$100			
\$101 - \$250	Afternoon in most areas	Afternoon in most areas	Morning in most areas
\$251 - \$500	Add \$10 to UPS ground charges at left	Add \$20 to UPS ground charges at left	Add \$30 to UPS ground charges at left
\$501 - \$750			
\$751 - \$1,000	May not be available to all delivery addresses.	May not be available to all delivery addresses.	May not be available to all delivery addresses.
\$1,000 & up			

Mail orders to: (Cut out and tape to envelope.)



APS Technologies

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Kansas City, MO 64120-0087



4mm, 8mm and CD Towers

Stop wasting your valuable desktop space on media storage. These media towers are configured to use minimal desktop space while securing and organizing your tapes and CDs. You can even wall mount the units to keep your desktop completely clear. The gray towers have a lightly tinted locking door that helps keep out dirt and dust while deterring unauthorized use of your media. The CD Tower holds up to 20 CDs, and the 4 and 8mm Tower holds up to 10 tapes each.

CAT. #	ITEM DESCRIPTION	SIZE	PRICE
100952	CD TOWER	13" H x 6" W x 6.5" D	\$14.95
100951	4MM TOWER	10" H x 4" W x 3.5" D	10.95
106161	8MM TOWER	10" H x 4" W x 3.5" D	10.95



CD Care & Storage Center

The CD Care & Storage Center combines CD-ROM storage, a CD-ROM drive lens cleaner, and a compact disc cleaning kit all in one compact unit. It provides 10 transparent CD jewel cases to organize discs, a disc cleaning kit to keep compact discs running great, and a CD-ROM drive lens cleaning kit to remove dust and debris from your CD-ROM drive's laser lens.



106608	CD CARE & STORAGE CENTER	\$21.95
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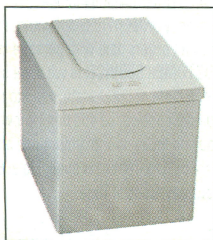
4mm Micro-Data Cubes

Micro-Data Cubes are the economical and compact way to keep your backup tapes organized, yet easily accessible. Stackable units hold 10 4mm tapes. (4" H x 8.25" W x 2.5" D)

100513	4MM MICRO DATA CUBES	\$9.95
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CDR-50 CD-ROM Storage Case

Has your collection of CD titles grown to the point where it resembles a small apartment complex? Then it's time to get the space-saving CDR-50 storage case. Thanks to the CDR-50's innovative ProSleeves, you'll be able to store up to 50 CDs in a quarter of the space that bulky jewel boxes require. The ProSleeve is a slim, plastic CD holder with a specially-formulated lining that protects the optical surface of the disc. It also has an open tab for easy indexing and a clear back pocket for booklets and manuals. In addition to the 50 ProSleeves, you get a dozen index dividers and adhesive labels for easy CD filing. (5.75" H x 6" W x 8.5" D)



106101	CDR-50	\$14.95
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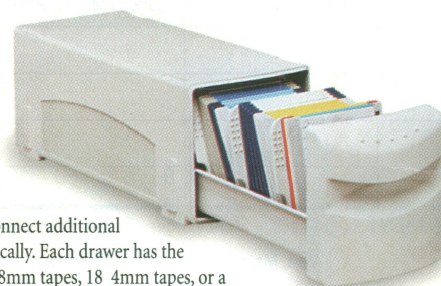
Archival Drawers

Secure your media against theft, dust and debris in an Archival Drawer. They have sturdy locks to keep your media safe, and you can stack multiple drawers together for more storage space as your media collection grows. The CD-ROM Archival Drawer holds up to 74 CDs, 215 5.25" optical disks, 100 4mm tapes or 13 VHS tapes. The Diskette Archival Drawer holds up to 240 3.5" diskettes, 48 4mm tapes or 40 8mm, QIC or Travan tapes, or a combination of the media listed.

CAT. #	ITEM DESCRIPTION	SIZE	PRICE
106141	CD-ROM ARCHIVAL DRAWER	6.5" H x 11.5" W x 18.75" D	\$39.95
106140	DISKETTE ARCHIVAL DRAWER	4.75" H x 8.75" W x 18.75" D	29.95

Computer Media Drawer

These sleek media drawers give you an economical storage option for your diskettes and tapes in a contemporary design. They have built-in connecting mechanisms that allow you to connect additional units both horizontally and vertically. Each drawer has the capacity for 85 3.5" diskettes, 8 8mm tapes, 18 4mm tapes, or a combination of these media. (4.75" H x 4.875" W x 12.625" D)



105271	COMPUTER MEDIA DRAWER	\$12.95
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CD/Multi-Media Drawer

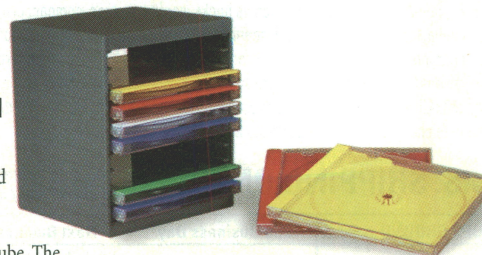
House and organize your CDs and other media in these aesthetically pleasing storage drawers. The drawers have a space-efficient footprint, and you can assemble several of these modular, stackable units to make a storage scheme to fit your needs. Each CD/Multi-Media Drawer can hold up to 27 CD-ROMs. The drawers will also hold 4mm and 8mm tapes, 3.5" optical media, Zip media, Travan cartridges, and 3.5" diskettes. Two adjustable compartment supports keep your media neatly organized inside the drawer. (7.15" H x 7.07" W x 12.75" D)



CAT. #	ITEM DESCRIPTION	PRICE
106606	CD/MULTI-MEDIA DRAWER	\$19.95
106607	CD/MULTI-MEDIA DRAWER 2-PACK	36.95

CD-ROM Jewel Box (6-pack w/CD-ROM Storage Cube)

Keep your CDs protected and organized with this set of six colorful jewel boxes and a designer gray color storage cube. The CD storage cube has slots for convenient storage of up to 10 CDs. (Cube dimensions: 6.5" H x 5.25" W x 5.25" D)



CAT. #	ITEM DESCRIPTION	PRICE
101587	6 JEWEL BOXES AND CUBE	\$6.95
100628	4 BLACK JEWEL BOXES	4.95
101588	10 JEWEL BOXES AND CUBE	9.95

Take Control Of Your CDs!

CD Storage

Discgear CD Storage

Safely store your valuable CD library in a fraction of the space that traditional jewel box storage requires with Discgear. Discgear employs a unique vertical storage scheme that eliminates bulky jewel boxes to give you safe storage on your desktop or on the road. Selecting a CD is easy using Discgear's patented retrieval system. Simply slide the

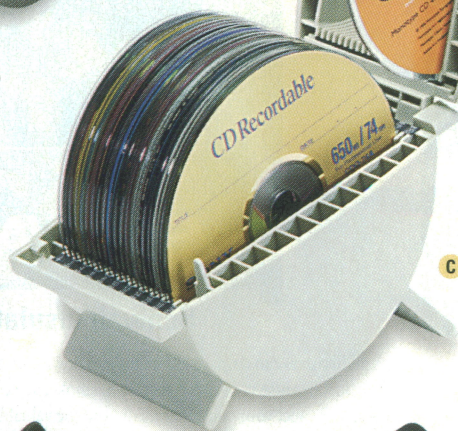
indicator over to the number

that corresponds to the CD you want, open the case, and *voilà*, the disc you want is at your fingertips. Use Discgear to store all of your music, game, and data discs.

On the road, choose Discgear 16. This storage unit holds up to 16 CDs and comes with a convenient shoulder strap for easy portability. As many as six Discgear 16s can be connected to give you even more portable CD storage space.

For the ultimate in desktop CD storage, choose the Discgear 20, Discgear 40, or Discgear 80. These storage units hold up to 20, 40, and 80 discs, respectively.

CAT. #	ITEM DESCRIPTION	PRICE
A 106609	DISCgear 16 (BLACK)	\$16.95
B 106612	DISCgear 80 (WHITE)	29.95
C 106610	DISCgear 20 (WHITE)	9.95
106611	DISCgear 40 (BLACK)	18.95



CD Rack

Using these black metal frame CD Racks, you can keep up to 24 CDs in jewel boxes readily accessible by your computer or stereo. The attractive modern design compliments any decor, and the rack's epoxy coating and protective feet help prevent the rack from scratching desktops and shelves. Two or more CD Racks may be stacked vertically using the included stacking clips, allowing your storage to grow with your CD collection. (5.75" H x 11" W x 5.25" D)

106259	CD RACK	\$14.95
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Sentry Interlocking CD Storage System

This compact and elegantly designed CD storage rack takes up only a bit more room than the 24 CDs it holds. Units can be positioned vertically or horizontally, and can even be wall mounted. The patented interlock system allows multiple units to form a single sturdy storage system that can expand as your CD collection grows.

(13" H x 6" W x 5.5" D)

101201	SENTRY CD STORAGE	\$9.95
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Wallet CD Cases

The CDK-20 Multimedia Case holds up to 10 CDs in protective ProSleeves™ and 10 diskettes in slotted side pockets. The CDR-12 stores up to 12 CDs in ProSleeves. Both vinyl cases have zippered closures to keep dust and dirt off of your media and padded sides to protect them during transport.

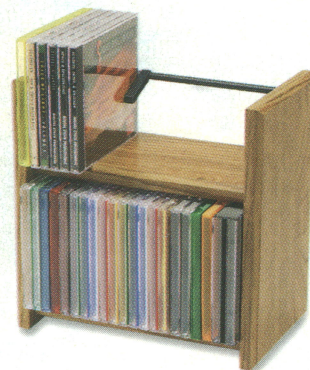
CAT. #	ITEM DESCRIPTION	SIZE	PRICE
106104	CDK-20 (10 CDS)	6.75" H x 2.25" W x 11.75" D	\$16.95
106105	CDR-12 (12 CDS)	6.125" H x 1.5" W x 6.25" D	10.95



Two-Shelf CD Stand

This cabinet-quality medium oak color CD stand is the perfect place to store your CDs for quick, convenient access. The quality construction features two shelves, each holding up to 22 CDs in jewel boxes. The Two-Shelf CD Stand's slotless design is a more efficient use of storage space and allows quicker access to your CDs than slotted systems. To keep your CDs securely upright, the CD stand provides a moveable support arm. (10" H x 10.5" W x 6" D)

106429	TWO-SHELF CD ORGANIZER	\$21.95
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Tree Dimensions™ CD Spinners

The smooth spinning action of the Tree Dimensions CD Spinners gives you quick access to all of your CDs. Tree Dimensions CD Spinners are made from selected hardwoods and provide a durable and attractive way to store your CDs. Model CDSP-100 holds up to 100 CDs, including slots for 12 double CDs, it measures 14.375" H x 11.875" W x 11.875" D. Model CDSP-200 holds up to 200 CDs, including slots for 24 double CDs, it measures 26.75" H x 11.875" W x 11.875" D. Both models come fully assembled and ready to use.

CAT. #	ITEM DESCRIPTION	PRICE
106615	CDSP-100	\$69.95
106616	CDSP-200	89.95



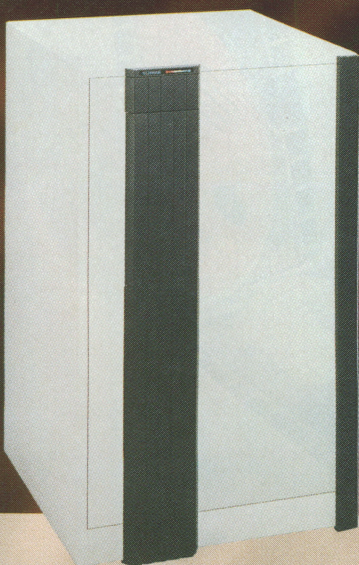
CDSP-200

CDSP-100

800-374-568
24 Hours a Day, 7 Days a Week

Fireproof Media Storage

Protect Your Media, Protect Your Business!



Before

SCHWAB CORP.

Your media is safe...
even after a 1700°F fire

After



Schwab Insulated Media Storage Cabinets

Office fires occur every day. Natural disasters can damage gas mains and down electrical lines, and faulty wiring can spark a blaze. Just because your office goes up in smoke, however, doesn't mean your business has to follow suit. Protect your computer media and the valuable information it contains from the damaging heat and humidity of an office fire by keeping your media locked in a Schwab Insulated Media Storage Cabinet.

Each cabinet carries the U.L. Class 125 Fire and Impact Resistant Rating at 1700° F, and medium to large companies will appreciate the generous storage capacities that the Schwab

media cabinets supply. These attractive key-locking cabinets come configured with two, three, or four multi-media drawers. Each drawer holds up to 240 - 3.5" diskettes, 56 - 8mm cartridges, 76 - 4mm cartridges, 54 compact disks, or a combination of the above. The cabinets carry a lifetime warranty on parts, and should a fire ever strike your office, Schwab provides free lifetime after fire replacement of the cabinet.

Standard delivery for the media safe is dock to dock. Inside delivery is available to most locations for a small fee.* Please allow seven to 10 days for delivery.

CAT. #	ITEM DESCRIPTION	EXTERNAL DIMENSIONS	INTERNAL DIMENSIONS	WEIGHT	LIST PRICE	VALUE PRICE
106470	TWO-DRAWER MEDIA CABINET (1816 CTS)	22.5" H x 22.75" W x 24" D	10.5" H x 12.75" W x 13" D	380 LBS.	\$2,198.00	\$1,749.95
106471	THREE-DRAWER MEDIA CABINET (1821 CTS)	27.5" H x 22.75" W x 24" D	15.5" H x 12.75" W x 13" D	431 LBS.	2,602.00	1,999.95
106472	FOUR-DRAWER MEDIA CABINET (1826 CTS)	32.5" H x 22.75" W x 24" D	20.5" H x 12.75" W x 13" D	483 LBS.	3,006.00	2,399.95
106473	INSIDE DELIVERY FOR MEDIA CABINETS*	—	—	—	125.00	79.95

*Inside delivery is available in the U.S. (except HI & AK) for the three Schwab Insulated Media Storage Cabinets only. It is available for non-union addresses requiring zero to two steps up for delivery. Deliveries to non-union locations requiring three or more steps will have an additional charge. Please call for a quotation.

Don't be misled by the protection claims of "Document Security Safes." Those products are only intended to protect documents. Media is much more vulnerable to fire damage and requires the protection that only specially designed media vaults can adequately provide. Less expensive media vaults may look the same, but don't deliver the protection necessary to keep your media safe. Ah, yes, they'll protect paper documents, but that protection stops several hundred degrees after your media has become a simmering puddle!



SENTRY®

Small Media Vault

- Holds up to 20 - 3.5" data cartridges

Keep your media and documents protected in a mobile unit with the Small Media Vault. It has a convenient carrying handle and a space-saving organizer. It holds up to 60 - 3.5" diskettes, 10 - 5.25" diskettes, 16 cassette tapes, 20 - 3.5" data cartridges, or over 30 DAT tapes. It has a key lock designed for privacy and disaster integrity (as opposed to high level security).
Interior dimensions: 4.375" H x 8.25" W x 5.875" D; 27 lbs.)

1341 SMALL MEDIA VAULT* \$145.95
(Ships via ground service. Allow 7 - 10 business days for delivery. No CODs.)



Media pictured
will actually fit
inside vault.

Medium Media Vault

- Holds up to 40 - 3.5" data cartridges

For on-site storage, the Medium Media Vault has a little over twice the capacity of the Small Media Vault. It holds up to 120 - 3.5" diskettes or 100 - 5.25" diskettes. It'll also hold about 40 data cartridges or up to 90 DAT tapes. The key lock is designed for privacy and disaster integrity.
(Interior dimensions: 8.125" H x 9.75" W x 6.375" D; 55 lbs.)

100399 MEDIUM MEDIA VAULT* \$239.95
(Ships via ground service. Allow 7 - 10 business days for delivery. No CODs.)



Separate fire-safe
compartment for
media

Large Media Vault

- Separate media and document compartments
- Holds up to 80 - 3.5" data cartridges

For both media and document areas in a large capacity, floor standing model, consider the Large Media Vault. It contains a separate fire-safe compartment for media with an interior door and a document security area. The fire-safe media compartment's interior measures 6.5" H x 9.625" W x 12" D. It provides protection for up to 200 - 3.5" diskettes, 140 - 5.25" diskettes or up to 80 data cartridges. The document security area's dimensions are 6.875" H x 14" W x 16" D. (249 lbs.)

100400 LARGE MEDIA VAULT* \$619.95
(Ships via ground service. Allow 7 - 10 business days for delivery. No CODs.)

Build Your Custom Media Storage Unit

Media Storage

4mm or CD-ROM Multi-Media Racks

Easily increase your 4mm and CD-ROM media storage capacity and organization. These Multi-Media racks are durable, efficient storage systems constructed of American-made, wire-welded, furniture grade steel. The open back has double cross braces that ensure stability. The racks have a small footprint and offer expandable storage options with easily-attached add-on units. They also have adjustable leveling glides and ship completely assembled for quick and easy set-up.

Single-sided racks can house up to 120 4mm cartridges or CD-ROMs per base unit and double-sided racks house up to 240 4mm cartridges or CD-ROMs per base unit. Each base unit will support up to two add-ons, each holding as many cartridges or CD-ROMs as the base unit. See for yourself how accessible and efficient your media storage can be with a Multi-Media Rack. All units ship UPS. Please allow 7 to 10 days for delivery.

CAT. #	ITEM DESCRIPTION	SIZE	CAPACITY	PRICE
101581	4MM SINGLE-SIDED BASE UNIT	(23" H x 31.125" W x 13.875" D)	120 CARTRIDGES	\$249.95
101582	4MM SINGLE-SIDED ADD-ON	(23.5" H x 31.875" W x 5" D)	120 CARTRIDGES	189.95
101583	4MM DOUBLE-SIDED BASE UNIT	(23" H x 31.125" W x 13.875" D)	240 CARTRIDGES	319.95
101584	4MM DOUBLE-SIDED ADD-ON	(23.5" H x 31.875" W x 5" D)	240 CARTRIDGES	219.95
106642	CD-ROM SINGLE-SIDED BASE UNIT	(23" H x 31.125" W x 13.875" D)	120 CD-ROMS	329.95
106643	CD-ROM SINGLE-SIDED ADD-ON	(23.5" H x 31.875" W x 5" D)	120 CD-ROMS	299.95
106644	CD-ROM DOUBLE-SIDED BASE UNIT	(23" H x 31.125" W x 13.875" D)	240 CD-ROMS	389.95
106645	CD-ROM DOUBLE-SIDED ADD-ON	(23.5" H x 31.875" W x 5" D)	240 CD-ROMS	349.95



Custom Multi-Media Racks

Customize a modular media storage unit to meet your specific needs. Start with a base unit and add Ten-Pacs of add-on racks as your storage needs grow. These empty racks are made of sturdy American-made steel and will accept 4mm, 8mm, Optical Disk and Multi-Media Ten-Pacs. Simply order the mix of Ten-Pacs you need from the listing below to create the storage rack that's perfect for you.

Each side of a Custom Multi-Media Rack will hold up to 12 4mm or 8mm Ten-Pacs, up to six Optical Disk Ten-Pacs, or four Multi-Media Ten-Pacs. You can also configure your rack to hold six 4mm or 8mm Ten-Pacs and three Optical Disk or two Multi-Media Ten-Pacs on each side. Each base unit will hold two add-on units which house as many Ten-Pacs as the base units. All units ship UPS. Please allow 7 to 10 days for delivery.

CAT. #	ITEM DESCRIPTION	SIZE	PRICE
105027	SINGLE-SIDED CUSTOM MULTI-MEDIA BASE	(23" H x 31" W x 13" D)	\$229.95
105028	SINGLE-SIDED CUSTOM MULTI-MEDIA ADD-ON	(23" H x 31" W x 5" D)	129.95
105029	DOUBLE-SIDED CUSTOM MULTI-MEDIA BASE	(23" H x 31" W x 13" D)	299.95
105030	DOUBLE-SIDED CUSTOM MULTI-MEDIA ADD-ON	(23" H x 31" W x 5" D)	199.95



CD-ROM Multi-Media Racks

Mix & Match Ten-Pacs on Custom Multi-Media Racks



Optical Disk Ten-Pac



Multi-Media Ten-Pac



8mm Ten-Pac



4mm Ten-Pac

Ten-Pacs

Creating a storage system that's right for you is easy when you add these Ten-Pacs to an empty Multi-Media Rack. The racks accept all of these Ten-Pacs which attach securely to the rack with a molded clip that also allows for easy removal. The Ten-Pacs are made of high-impact polystyrene, so they're rugged and durable.

The 8mm and 4mm Ten-Pacs hold 8mm and 4mm media, respectively, and keep your tapes secure with a cartridge lock strip. The Optical Disk Ten-Pac is designed to hold 5.25" MO cartridges and CD-ROMs. The Multi-Media Ten-Pac is the most versatile, holding TK50, TK70, DC600A, 1/4" Streamer and 3480/3490 media as well as microfilm cartridges. Each Ten-Pac will handle up to 10 pieces of media.

CAT. #	ITEM DESCRIPTION	SIZE	PRICE
105025	8MM TEN-PAC	(4.625" H x 9.75" W x 2.125" D)	\$6.95
101585	4MM TEN-PAC	(4.625" H x 9.75" W x 2.125" D)	6.95
101586	OPTICAL DISK TEN-PAC	(5.125" H x 9.75" W x 6.75" D)	10.95
105026	MULTI-MEDIA TEN-PAC	(4.5" H x 14.25" W x 4.5" D)	10.95



Carousel with add-on

4 and 8mm Carousels

If you prefer a revolving desk- or table-top modular unit for your 4 or 8mm cartridge storage, these carousels are the perfect answer. The base unit holds 40 cartridges, and add-on which hold 40 cartridges each are available so your storage system can grow with your needs. All units ship UPS.

4MM	8MM	ITEM DESCRIPTION	PRICE
101579	106162	CAROUSEL BASE	\$169.95
101580	106163	CAROUSEL ADD-ON	129.95

Products on these pages are not covered by APS' 30-day money-back guarantee. Products are covered by manufacturer's warranty.

800-374-568
24 Hours a Day, 7 Days a Week

Printers

Great Value On Quality Printers

(Glossary Continued from page 32)

RAID (Redundant Array of Independent Drives) combines a number of individual hard disk drives to speed data transfer and/or provide redundancy/ data reliability.

RAM (Random Access Memory): silicon-based "memory" in a computer. RAM stores data electronically. The operating system and active programs typically use RAM to store information and calculations.

Random Access: a term used with storage devices to indicate that data can be retrieved from any physical position on the media without waiting for the device to first hunt through other data which may be irrelevant, but which was recorder first. Any device utilizing a spinning disk is a random access device. If data from the middle is needed, the head jumps out to the middle of the disk without having to scan all the data in between.

Removable Device: any drive which uses removable and, or replaceable media. The advantage of removable devices is their expandability. As more storage is needed, simply switch out the media.

SCSI (Small Computer System Interface): an electronic data protocol and "intelligent" hardware interface used by a computer to communicate with a hard disk or other SCSI peripheral device.

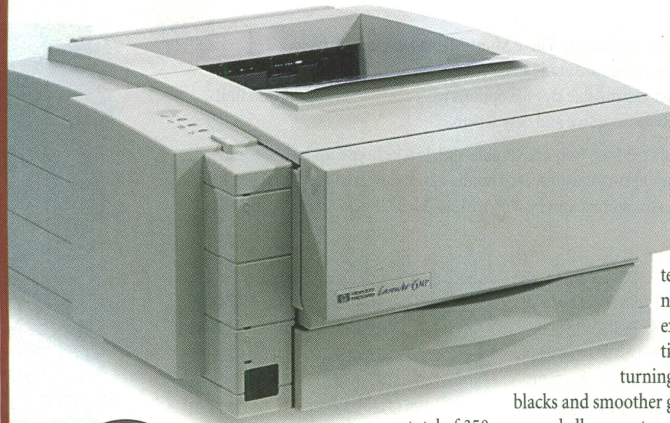
SCSI ID: logical addresses assigned to SCSI devices connected to a Macintosh or other SCSI-capable computer. A unique SCSI number must be assigned to each and every SCSI device connected to your computer (hard disks, SCSI printers, tape drives, scanners, etc.).

SCSI Bus, -es: the wires and cables that connect the peripherals to the Macintosh and allow data to flow between your computer's CPU and the attached SCSI peripherals. Collectively, these wires and cables, along with the internal circuitry sending and receiving the signals, constitute the SCSI bus.

SCSI Chain: the collection of devices connected to your SCSI bus. The SCSI devices are chained from one to the next, with a terminated device (drive or adapter) at each end.

Seek Time: the amount of time (in milliseconds), that it takes a drive's read/write head to move

(Continued on page 47)



HP LaserJet 6MP

- 8 pages per minute
- Instant-on fuser eliminates warm-up
- Holds up to 350 sheets of paper

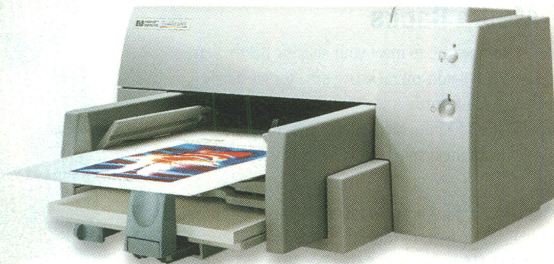
The HP LaserJet 6MP is designed for the value-conscious and the feature-hungry. With its 24MHz Intel RISC processor and 3MB of memory, effectively doubled with HP's Memory Enhancement technology, the HP LaserJet 6MP can handle network or individual needs. An 8-page per minute print engine provides you with excellent speed and the built-in instant-on fuser eliminates warm-up time and allows you to print your first page only 19 seconds after turning the printer on. The HP LaserJet 6MP delivers crisper lines, blacker

blacks and smoother gradients in all your text and graphics. Its two paper sources hold a total of 350 pages and allow you to print on paper sizes ranging from post cards to legal without changing trays. The HP LaserJet 6MP is backed by a one-year limited warranty and includes HP's free Express Exchange overnight printer replacement (U.S. and Canada only).

106646
101539

HP LASERJET 6MP
HP TONER CARTRIDGE (C3903A)

\$999.95
85.95



HP DeskWriter 680C

- Full-featured color and black & white printing
- Offers two-sided printing

Whether you want to print a colorful banner, a two-sided newsletter, or just a sharp business letter, the new HP 680C is the versatile color printing solution for your home or office. It has two-sided printing capabilities and outputs black pages at up to 5 ppm and color pages at up to 1.5 ppm. In black mode, it prints at up to 600 x 600 dpi and in color mode up to 300 x 300 dpi on plain paper. (7.9" H x 17.2" W x 16" D)

CAT. #	ITEM DESCRIPTION	PRICE
106383	HP DESKWRITER 680C	\$299.95
101538	HP COLOR (HP-51649A) CARTRIDGE	27.95
105054	HP BLACK (HP-51629A) CARTRIDGE	27.95

Epson Stylus Color 500

- Photo quality 720 dpi printing
- Uses exclusive Piezo Printing

Providing superb color images and crisp black output at up to 720 x 720 dpi, the new Epson Stylus Color 500 is an excellent ink jet printer. The Epson Stylus Color 500 uses new "Super Penetrating" fast-drying inks in conjunction with their exclusive Piezo Printing technology to deliver rich, vibrant color and precise ink placement on all types of media, including plain paper and transparencies. The printer is backed by a two-year manufacturer's warranty. (7.8" H x 17" W x 9.8" D; 11 lb.)



CAT. #	ITEM DESCRIPTION	PRICE
106630	EPSON STYLUS COLOR 500	\$299.95
105410	BLACK INK CARTRIDGE (S020034)	15.95
105409	COLOR INK CARTRIDGE (S020036)	34.95

Epson Stylus® Pro XL

- Perfect for making comps and final color proofs
- Prints full-color pages with bleeds up to 12.5" x 18"

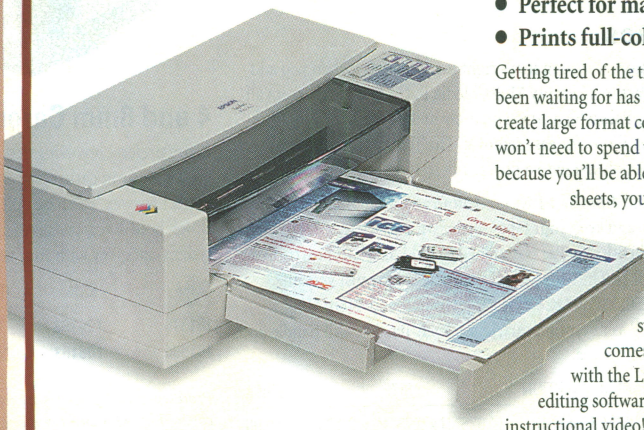
Getting tired of the time and expense of a service bureau? The color printing solution you've been waiting for has arrived. You can use the inexpensive Epson Stylus Pro XL ink jet printer to create large format color comps and final proofs. Your service bureau may be upset, but you won't need to spend your time or money with them for your high quality final color proofs because you'll be able to make them in-house. From letter size pages to full spreads on 13" x 19"

sheets, you can use the Epson Stylus Pro XL for high-quality color layouts at up to

720 x 720 dpi. It produces the smooth color gradations, excellent flesh tones and impressive gray scale printing you need to get your ideas approved by colleagues and clients alike. This printer is compatible with Macs running System 7.1 or later as well as Windows-based

systems and it has both parallel and serial ports for easy connection. It comes with a two-year manufacturer's warranty. The Stylus Pro XL also comes

with the Live Picture Productivity Pack, which includes Live Picture 2.5 SE image editing software on CD-ROM, a comprehensive tutorial book and a step-by-step instructional video!

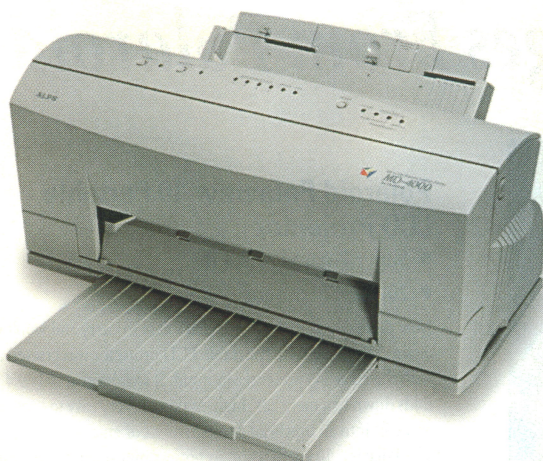


Products on these pages are not covered by APS' 30-day money-back guarantee. Products are covered by manufacturer's warranty.

106025
106157

EPSON STYLUS PRO XL
EPSON 720 DPI PAPER 13" X 19", 100 SHEETS

\$1,798.95
69.95



Alps MD-4000 Color Printer/Scanner

- 24-bit, TWAIN compatible 600 dpi scanning
- 600x600 dpi color printing with 16.7 million colors



For one price, the Alps MD-4000 gives you a photo-realistic printer and a full color scanner as well. It's the perfect all-in-one solution for scanning color or black and white images into your computer for manipulation, and then printing them out in up to 16.7 million colors. For scanning, the MD-4000 utilizes 24-bit TWAIN compatible 600 dpi optical scanner. As a printer, it is capable of printing 16.7 million colors at 600x600 dpi or 1200x600 dpi grayscale images. It also utilizes Alps' patented Micro Dry™ process-the ink goes on dry and stays on! The ink won't run or smudge when it gets wet, or fade when exposed to sunlight, giving you a high-quality brilliant color print!

106648

ALPS MD-4000 COLOR PRINTER/SCANNER

\$649.95



Alps MD-2010 Color Printer

- 600x600 dpi color printing with 16.7 million colors
- Features dry ink printing



Until now your choices for affordable high quality color printers were limited to bubble jet and ink jet printers. Now there's an alternative-the Alps MD-2010 photo-realistic color printer delivers true 600x600 dpi resolution in 16.7 million brilliant, life-like colors and 1200x600 dpi grayscale printing. With the Alps MD-2010 color printer, you'll never have to worry about ink smearing, smudging or running the MD-2010 uses the patented Micro Dry™ printing process. The ink goes on dry and stays on-it's waterproof and fadeproof!

106647

ALPS MD-2010 COLOR PRINTER

\$449.95

Endust for Electronics

Regular cleaning of your electronic devices keeps them looking great and may help prolong the life of those products. This safe, effective cleaner picks up dust, preventing it from clogging air vents. It whisks away fingerprints to keep your monitor looking its best. The spray helps prevent the build-up of static charges to help keep your monitors, keyboards, printers, SCSI devices, and other electronic products dust-free. The 4 oz. spray comes in a pump dispenser and is intended for use on exterior surfaces only.



106622

ENDUST FOR ELECTRONICS, 4 OZ. PUMP SPRAY

\$2.95



Vista-S6E Scanner

- Resolution up to 4800 x 4800 dpi†
- Includes the powerful, easy-to-use VistaScan 2 scanning software



The Vista-S6E scanner from UMAX is your solution for exceptional quality scanning at an affordable price. This single-pass, cold cathode lamp scanner insures high-quality scans. The Vista-S6E handles pages up to 8.5" x 11.7" and has an optical resolution of 300 x 600 dpi and an interpolated resolution of up to 4800 x 4800 dpi with 24-bit color capabilities. It comes with the powerful, yet easily mastered VistaScan 2 scanning software. The Vista-S6E scanner also includes either PhotoShop LE or the full version depending on the software bundle you choose.

CAT. #	ITEM DESCRIPTION	PRICE
106370	VISTA-S6E W/LE SOFTWARE	\$499.95
106391	VISTA-S6E W/PRO SOFTWARE	629.95
106560	AUTO DOCUMENT FEEDER	494.95

Vista-S12 Scanner

- Greater detail in the highlights and shadows
- Scan directly to industry CMYK files



The Vista-S12 from UMAX combines all of the powerful optics of a professional quality scanner with incredible ease of use. Using UMAX's new autoscanner driver, you simply place your image in the scanner, and in one step your image is in your computer awaiting your modifications. The Vista-S12 has an optical resolution of 600 x 1200 dpi and can achieve up to 9600 x 9600 dpi through interpolation. Its 33-bit equivalent color capabilities (24-bit usable) also improve shadow and highlight detail on scanned images. This fast, single-pass flatbed scanner can accommodate pages up to 8.5" x 11.7", and can even scan images directly into industry standard CMYK files.

CAT. #	ITEM DESCRIPTION	PRICE
106372	VISTA-S12 W/LE SOFTWARE	\$649.95
106373	VISTA-S12 W/PRO SOFTWARE	749.95
106617	TRANSPARENCY ADAPTER	189.95

Two Software Options!

LE software bundle includes:

PhotoShop Limited Edition
*Presto! PageManager with OCR

Pro software bundle includes:

PhotoShop Full Version
*Presto! PageManager with OCR

*Presto! PageManager with OCR is a document and image management application which allows you to drag and drop scanned pages to OCR, fax, print, and E-mail functions, or drag and drop them into other applications. The software also lets you scan items directly to a printer, fax, or E-mail program.

Machine Clean

Clean your laser printer, copier or plain paper fax quickly and easily with these cleaning sheets. Just run a sheet through a normal print or copy operation two or three times, and the sheet will remove the dirt, dust and toner deposits that reduce print quality. Includes 25 cleaning sheets.



105218	MACHINE CLEAN	\$19.95
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Polaroid Polaview 10 Portable LCD Projector

- Super Portable – 9.4 lbs.
- 200 ANSI Lumens

Now there's an LCD projector that's easy to carry and won't weigh you down. The Polaview 10 portable LCD projector was created and designed with the traveling presenter in mind. It weighs in at only 9.4 pounds and folds down to a mere 2.9" high, making it very easy to transport – it will easily fit into an overhead compartment of an airplane or under the seat. The Polaview 10 enables you to project high-quality multimedia images anytime, almost anywhere you desire – and with the Polaview 10, you don't have to sacrifice quality for portability. With up to 800 x 600 resolution (compressed), 200 ANSI lumens and over 16 million colors, it provides sharp, clear images in almost any room lighting situation. Other features include illuminated panel controls, remote on-screen menus, rear-facing stereo speakers, NTSC/PAL/SECAM video, and PC and Mac capability. A soft-sided carrying case with plenty of room for both the Polaview 10 and your laptop, the remote control and all cables and adapters are included.

106650

POLAROID POLAVIEW 10*

\$4,379.95

Polaroid SprintScan 35/ES

- New ES feature IQA™ technology (Image Quality Analysis)
- High-quality 35mm film – positive or negative
- Scans images at up to 2700 dpi with 24-bit color
- Scans in less than a minute

Scanning high-quality 35mm slides has just become a lot easier – and faster! The Polaroid SprintScan 35/ES scans your 35mm slides in under a minute each. That's 5 to 15 times faster than other leading scanners. It'll save you hours on processing your scans if you use it often. If you only scan a few slides a day, it'll save you the time and money of having a service bureau scan your slides. This scanner doesn't sacrifice quality for speed, though. It captures images at up to 2700 dpi and selects 24-bit RGB color from a broad dynamic range to give you better color matching and shadow detail. The quality of these scans is high enough to use them in four-color separations, making it perfect in a desktop publishing or pre-press environment. SprintScan 35/ES includes a Photoshop plug-in and provides automatic image sharpening, image smoothing and color correction so many images are ready for use with little or no Photoshop work. SprintScan 35/ES uses a SCSI-2 interface. It requires a Quadra or better running System 7.0.1 or later with 8MB of available RAM, but 16MB or RAM is recommended. SprintScan 35/ES is backed by a one-year manufacturer's limited warranty.



105305

POLAROID SPRINTSCAN 35/ES*

\$1,579.95



UMAX PageOffice

- Document feeder holds up to 10 pages
- Fax, E-mail, edit, and file or print scanned pages
- Includes OCR software and uses a SCSI interface

The compact PageOffice personal scanner scans pages from business card through legal size sheets at 300 dpi and attaches to your Mac via a convenient SCSI interface. Its document feeder holds up to 10 pages for quick scanning of multiple-page documents, and includes document, filing, transmission, editing, and OCR software. PageOffice is backed by a one-year warranty. (5" - 10" H x 13" W x 5" D)

105304

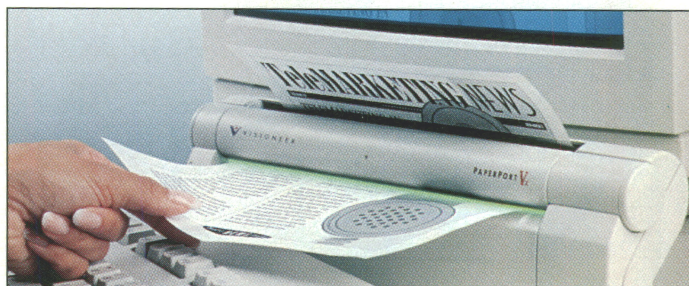
PAGEOFFICE*

\$199.95

40

800-374-5681
24 Hours a Day, 7 Days a Week

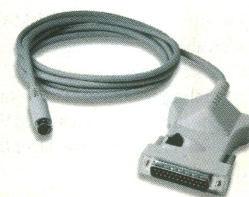
*APS 30-day money-back guarantee not applicable.
Product covered by manufacturer's warranty.



Visioneer PaperPort VX

- Fax, file, edit, print or E-mail scanned pages with drag & drop ease
- Three software packages including OCR

The PaperPort Vx is a complete document management system, scanning everything from business cards to letters and articles, and letting you fax, edit, E-mail, or apply OCR to those documents. The included software also makes it easy to file and retrieve scanned documents. The PaperPort Vx scans at up to 400 dpi and is backed by a one-year manufacturer's limited warranty. Includes coupon for a free SCSI adapter cable shipped directly from Visioneer. (12.5" L x 2.5" W x 3 3/4" W)



CAT. #

ITEM DESCRIPTION

PRICE

105125

PAPERPORT VX FOR MACINTOSH*

\$299.95



Women's Leather Computer Briefcase & Executive Leather Briefcase

Now carrying your laptop around doesn't have to be drab. These two stylish briefcases give you padded computer compartments, adjustable dividers and a security strap to hold your computer and other sensitive equipment. Both the Women's Leather Computer Briefcase and the Executive Leather Briefcase are made with 100% top grain leather exteriors and feature a removable shoulder strap. They also have zippered compartments and gusseted mesh pockets to hold smaller accessories. The Women's Leather Computer Briefcase also comes with a matching leather clutch purse. The Executive Leather Briefcase features tan accents.

CAT. #	ITEM DESCRIPTION	PRICE
106597	A WOMEN'S LEATHER COMPUTER BRIEFCASE	\$199.95
106598	B EXECUTIVE LEATHER BRIEFCASE	199.95

Tenba® Computer Traveler

- Expands from 4" to 7" wide for use when traveling

Whether you're simply commuting to and from work, or spending a week on the road, this carrying case is the ideal protector for your PowerBook or laptop computer. It uses a removable closed-cell insert that keeps bumps from harming your computer in transit, and a durable waterproof Protek cloth exterior keeps all of its contents safe and dry. There are lots of pockets that keep your small essentials organized and a secure pocket that's ideal for airline tickets and a passport. Comfortable leather handstraps and a non-slip padded shoulder strap round out this bag, making it perfect for your mobile computing needs. (12.5" H x 16" W x 4" to 7" D)



105096	TENBA COMPUTER TRAVELER	\$129.95
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Commuter Case

- Great for rugged, demanding use

Keep your PowerBook safe when you carry it inside this heavy-duty nylon Commuter Case. The full wrap of one-inch high density, closed cell foam and retaining straps protects your PowerBook from damage-causing bumps and bruises while in transit. The movable partition keeps the power supply safely separated from the PowerBook. The computer case has ample storage space for papers, diskettes and the like. (12.5" H x 17" W x 5" D)

100624	COMMUTER CASE	\$49.95
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Wheeled Traveler Computer Case

- For the executive on the go

This all-in-one computer briefcase and overnight bag keeps clothing and personal items neat and organized. It's perfect for those overnight business trips when you need both a briefcase and a suitcase. Wheels and a telescoping handle make treks through airport terminals a breeze and an internal expandable file compartment keeps important papers in order.

106599	WHEELED TRAVELER COMPUTER CASE	\$299.95
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Tenba® Computer Back Pak Thin

- A perfect computer carrying case for students

Now you can transport your PowerBook in the securely padded main compartment of a comfortable, stylish backpack. The Computer Back Pak Thin is made from rugged nylon pack cloth, and in addition to your PowerBook, the pack has room for a power supply, portable printer, and even some paper. The pack even has handy organizer pockets for diskettes and other small essentials as well as a separate pocket to secure your keys. The Computer Back Pak Thin's non-skid shoulder straps are thickly padded and contoured for comfortable carrying; a rubber handle on top may also be used to transport the pack.



106375	COMPUTER BACK PAK THIN	\$79.95
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PowerBook Wetsuit 1.0

- Includes stretch storage pocket

Protect your PowerBook 500, PowerBook Duo, or PowerBook 140-180c from scratches and spills all day, every day. Although it's not a PADI® certified note-taking accessory for your deep-sea explorations, the PowerBook Wetsuit is extremely beneficial to your PowerBook on dry land. It gives you full access to your computer and its data ports while the computer stays in this protective padded neoprene case. Inside the case, your PowerBook is secured in place by elastic bands and a tex-skin lining. A protective plate helps protect your screen from impact damage. Outside you'll find a stretch storage pocket that you can use to store extra batteries, cables and other small items. (The Wetsuit fits laptop computers in size range of: 1.9" to 2.4" H x 9.0" to 9.8" W x 11.0" to 11.8" D.)



CAT. #	ITEM DESCRIPTION	PRICE
101390	BLACK POWERBOOK WETSUIT 1.0	\$34.95
101392	BLUE POWERBOOK WETSUIT 1.0	34.95
101394	BURGUNDY POWERBOOK WETSUIT 1.0	34.95
105407	PURPLE POWERBOOK WETSUIT 1.0	34.95





Apple Keyboards

Replace your old, worn keyboard with a new high-quality Apple keyboard. Both keyboards offer a 105 key layout with 15 function keys and separate numeric and cursor keypads. The Apple Extended Keyboard II has more space around the function keys and a blank function key labeling template. The key layout on the Apple Extended Keyboard II is also curved, making it more comfortable to use.

CAT. #	ITEM DESCRIPTION	PRICE
100534	APPLE DESIGN KEYBOARD†	\$79.95
101209	APPLE EXTENDED KEYBOARD IIT	154.95

Apple PowerBook Batteries

Always keep a charged battery on hand so you can run your PowerBook on batteries any time you need. These Apple brand batteries are identical to the original battery in your PowerBook 140 to 180c or your PowerBook Duo.

CAT. #	ITEM DESCRIPTION	PRICE
100572	POWERBOOK 140 - 180C BATTERY†	\$65.95
100539	POWERBOOK DUO HIGH-CAP. TYPE II†	119.95
106188	POWERBOOK DUO BATTERY CHARGER†	129.95



PowerBook Intelligent Batteries

To use your PowerBook 190, 5XX, or 5300 to its fullest, you need at least two of the batteries it uses – one in use, and one being charged. The 500-series battery is compatible with PowerBook 520, 520c, 540, and 540c, and the NiMH battery works with PowerBook 190 and 5300-series computers. Where performance and reliability are a must, only an Apple battery will do.

CAT. #	ITEM DESCRIPTION	PRICE
100570	POWERBOOK 500-SERIES BATTERY†	\$129.95
106355	POWERBOOK 190 AND 5300-SERIES NiMH BATTERY†	179.95

PowerBook AC Adapters

Save your PowerBook batteries for when you really need them, and keep your in-use batteries charged by using an AC adapter with your PowerBook. These portable AC adapters plug into your PowerBook and any standard 110v power outlet, providing power to your computer without depleting your battery reserves. They're ideal for use in the office, at home, or in a hotel room.



CAT. #	ITEM DESCRIPTION	PRICE
106356	POWERBOOK 5300/190-SERIES AC ADAPTER†	\$59.95
100573	POWERBOOK DUO AC ADAPTER†	89.95
103129	POWERBOOK 500-SERIES AC ADAPTER†	129.95

Apple PlainTalk Microphone

Record sound bytes directly from your Mac with the Apple PlainTalk Microphone. You can use the recorded segments in presentations and multimedia productions, or to personalize your Mac's alert sounds. It connects to your Mac with a standard stereo jack. Requires a Power Mac or an AV Mac.

100564	APPLE PLAINTALK MICROPHONE†	\$29.95
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Newton Toolkit for Macintosh, 1.6

Easily create software for the Newton operating system. This development environment reduces the complexity and time required to create software for the Newton by providing rapid prototyping, a graphical user interface editor, and an interactive development cycle.

106264	NEWTON TOOLKIT FOR MAC 1.6*	\$289.95
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NewtPaint

Download graphics or create your own images. This bitmap editor arms you with several selectable tools and views so you can draw or edit images on your PDA's screen. NewtPaint also includes a ClipArt Browser so you can create a scrapbook of images on your MessagePad.

106582	NEWTPAINT*	\$44.95
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quickNAMES Pro

This is an essential add-on utility for keeping your contacts organized on your MessagePad. Its fast search engine gives you instant access to frequently used names and lets you search your list by first, last, or company name. Provides one-tap dialing while observing all access codes.

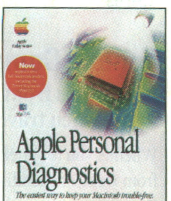
106584	QUICKNAMES PRO*	\$34.95
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proCALC Ex

Whether your field is business, science, or engineering, proCALC Ex provides your MessagePad with a powerful problem-solving environment. Designed for technical professionals who need the flexibility of RPN or algebraic input logic, proCALC Ex comes with over 95 built-in scientific and business functions.

106583	PROCALC EX*	\$54.95
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Apple Software

CAT. #	ITEM DESCRIPTION	PRICE
106371	INTERNET CONNECT KIT*	\$49.95
100228-001	APPLE REMOTE ACCESS*	174.95
100227-001	APPLE SYSTEM 7.5*	99.95
105264	APPLE PERSONAL DIAGNOSTICS 1.1.3*	99.95

Color StyleWriter 2400 & 2500

(Ink Refill Cartridges)

Make the printed pages from your Apple Color StyleWriter 2400 come to life by using genuine Apple replacement ink cartridges. They ensure the best possible print quality and the truest colors every time.

CAT. #	ITEM DESCRIPTION	PRICE
100580	BLACK INK CARTRIDGE	\$9.95
100581	COLOR INK CARTRIDGE (C,M,Y)	17.95



Apple Scribe® (Printer Ribbon Cassettes)

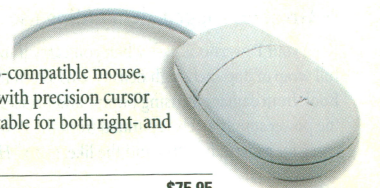
Be certain to use only Apple brand ribbon cassettes with your Scribe printer so you get dark, crisp black print output with every page. Each of the three cassettes will print approximately 40 to 50 pages of text.

101200	SCRIBE RIBBON CASSETTES	\$14.95
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Apple Mouse II

Control your cursor with this high-quality ADB-compatible mouse. The Apple Mouse II has a single-button design with precision cursor control and an ergonomic design that's comfortable for both right- and left-handed users.

100535	APPLE MOUSE IIT	\$75.95
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Newton PDA & Accessories from APS



Apple MessagePad 130

- User-controllable backlit screen
- Comes with 8MB ROM and 2.5MB of RAM
- Excellent organization and personal productivity tool
- PDA runs on the improved Newton 2.0 operating system

Keep organization and communications at your fingertips when you carry the Apple MessagePad 130. This personal digital assistant (PDA) runs the improved Newton 2.0 operating system and provides a built-in notepad, to-do list, datebook, telephone file, and Pocket Quicken (U.S. only) to keep you organized and productive no matter where you are. The Newton 2.0 operating system has improved handwriting recognition for both cursive and printing, and accepts information as digital ink, printed text and hand drawn graphics from the on-screen keyboard, or an optional external keyboard. The MessagePad 130 has a new user-controllable backlit screen for on-demand use and a non-glare screen which provides comfortable, easy viewing in any lighting condition. This version of the popular MessagePad comes with additional system memory – 8MB ROM and 2.5MB RAM – to provide improved multitasking support and performance with communications applications. MessagePad 130 ships with Newton Backup Utility software, allowing you to easily exchange information with a Mac- or Windows-based computer using an included serial cable.

106262

APPLE MESSAGEPAD 130*



\$699.95



Newton Keyboard

Entering information into your MessagePad running Newton 2.0 is as easy as typing when you attach the Newton Keyboard. This lightweight, portable keyboard comes with a serial cable and an attractive carrying case so you can take it anywhere you take your MessagePad.

106263

NEWTON KEYBOARD*

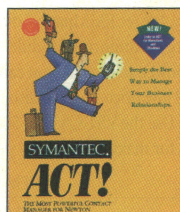
\$78.95

Newton Accessories

CAT. #	ITEM DESCRIPTION	PRICE
106266	2MB FLASH STORAGE CARD*	\$119.95
106267	4MB FLASH STORAGE CARD*	229.95
106261	RECHARGEABLE NICAD BATTERY PACK (4-AA)*	19.95
106260	BATTERY CHARGING STATION*	84.95
106268	AC POWER ADAPTER*	29.95
106269	PRINT PACK*	89.95

ACT! for Newton

Make your Newton an even more powerful organizational and productivity tool with ACT! for Newton. The contact database stores important contact information and notes while the activity scheduler's alarm help keep you aware of all of your scheduled events.



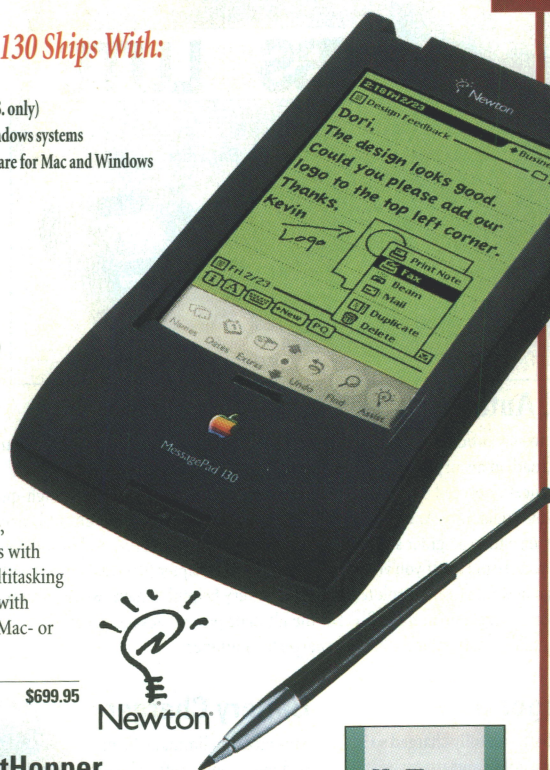
106440

ACT! FOR NEWTON*

\$99.95

Apple MessagePad 130 Ships With:

- ✓ Telescoping Pen
- ✓ Pocket Quicken software (U.S. only)
- ✓ Serial cables for Mac and Windows systems
- ✓ Newton Backup Utility software for Mac and Windows



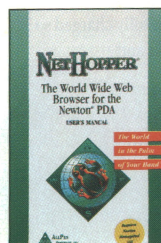
NetHopper

Use this text-based Web browser with your MessagePad running the Newton 2.0 operating system for easy Web access. NetHopper supports many standard HTML features such as forms and hypertext links. The software also allows you to connect wirelessly, view pages offline, and create bookmarks, using any Newton-compatible modem.

106971

NETHOPPER**

\$44.95



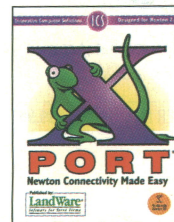
X-Port

Quickly and easily transfer data between your MessagePad and your Mac or PC using X-Port. This software package allows you to transfer information to your desktop computer via your serial or LocalTalk port, or download contact information, graphics (BMD or PICT), or packages to your MessagePad.

106570

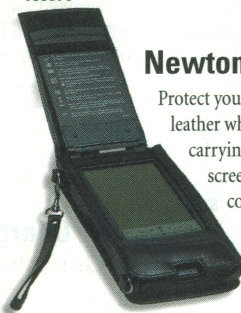
X-PORT**

\$44.95



Newton Glove Carrying Case

Protect your MessagePad in stylish, padded black glove leather while maintaining access to the PDA. This carrying case has a front flap to open the PDA's screen and openings for all the MessagePad's controls and ports.



106563 NEWTON GLOVE CASE* \$39.95

PalmTop/PDA Leather Case

Keep your PDA and all of its accessories secure and neatly organized inside this luxurious carrying case made of soft black leather. (10.25" H x 7.25" W x 3" D)



106039

PALMTOP/PDA LEATHER CASE*

\$59.95

Newton® PDA

Apple MessagePad 130 Q&A

Q: Why should I step up to the top-of-the-line MessagePad 130?

A: The MessagePad 130's on demand back lighting makes it easier to read in dimly lit or dark areas, and its non-glare screen also improves readability in full light. The MessagePad 130 also uses the new Newton 2.0 operating system which won Byte Magazine's Best Operating System of COMDEX in November of 1995.

Q: Has handwriting recognition improved for the new MessagePad 130?

A: Yes. The Newton 2.0 operating system has excellent handwriting recognition. Additionally, the MessagePad 130 has system memory to improve performance for the other programs you'll run.

Q: I have a hard time writing on the smooth glass surface of a MessagePad. Has the MessagePad 130 done anything to make writing feel more natural?

A: The new MessagePad 130 uses a textured, non-glare screen which gives it the familiar feel of writing on paper as opposed to a smooth glass surface.

Q: Is the MessagePad 130 limited to just a few simple programs?

A: Actually, dozens of useful brand name and third party applications, including Web browsers, have been written for the MessagePad 130's Newton 2.0 operating system. Programs such as Net Hopper and X-Port (at left) have improved the MessagePad 130's overall functionality.

Q: What's the best way to clean my MessagePad 130?

A: We've found that Meridrew's klear screen™ and klear kloth™ products offer the best cleaning for any MessagePad. They clean without scratching the screen surface, and leave behind a clear, anti-static coating. They are available from APS using the following information:

AN 8 OZ. BOTTLE OF KLEAR SPRAY (ENOUGH FOR MORE THAN 1,000 APPLICATIONS)

CAT. #	PRICE
100459	\$9.95

SIX LINT-FREE, 11" x 12" REUSABLE KLEAR KLOTHS

CAT. #	PRICE
100457	\$5.95

PowerBook Batteries

Keep Your PowerBook Portable & Productive



Absolute Batteries, Auto Adapters and AC Adapters

Absolute has everything you need to stay productive with your PowerBook. Extra PowerBook batteries let you stay "powered up" when you're on the road, in an airplane, or anywhere you can't plug your PowerBook in. Each Absolute battery is constructed to meet or exceed the specifications of your original battery. They use high-quality cells to deliver the best battery life and reliability. Another power solution for your PowerBook is an auto adapter. They're easy to use - just connect one end to a lighter socket and the other to your PowerBook and they'll power your computer without depleting your batteries. If you've lost or broken the AC adapter that was shipped with your PowerBook, simply replace it with a new one from Absolute. It can also be very helpful to have two AC adapters - keep one plugged in at home and one plugged in at the office. For the ultimate power package, get an Absolute combo pack. Each combo pack contains a battery and a battery charger/conditioner.

Duo LED SuperCharger II

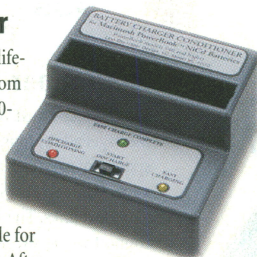
Keep your spare PowerBook Duo batteries fully charged so you can stay productive in airplanes, hotels and anywhere else that you can't dock or plug in your computer. The Duo LED SuperCharger II fully and quickly charges the Duo's NiMH batteries. It doesn't require slow trickle charging, so you can get a full charge in as little as two hours. As it charges your Duo's batteries, the charger conditions the batteries to prevent the reduced charge capacity that is caused by the dreaded "memory effect." *Battery sold separately.*



100472 DUO LED SUPERCHARGER II \$139.95

Battery Charger

Minimize or eliminate the life-sucking "memory effect" from your NiCad PowerBook 140-180c batteries. It fully discharges and conditions your battery prior to charging it to assure maximum power every cycle for the entire life of the battery. After conditioning, full charging takes approximately five hours. *Battery sold separately.*



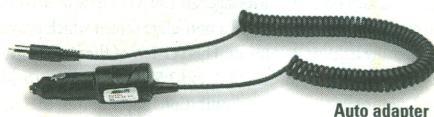
100497 BATTERY CHARGER \$59.95

Apple PowerBook Battery

You should always keep a spare charged battery on hand for your PowerBook so you can use your computer on the go. This Apple brand rechargeable replacement battery is identical to the original battery in your PowerBook 140 to 180c.



100572 APPLE POWERBOOK BATTERY \$65.95
100539 APPLE POWERBOOK DUO III BATTERY 119.95



Auto adapter

PowerBook Intelligent Battery

To use your 500-series PowerBook's portability to its fullest, you'll want to keep at least one of the Intelligent Batteries it uses charged at all times. This Apple battery is an exact replacement for the battery in your PowerBook 520, 520c, 540 and 540c. Where performance and reliability are a must, only an Apple replacement battery will do.



100570 POWERBOOK INTELLIGENT BATTERY \$129.95

PowerBook AC Adapters

Save your PowerBook batteries for when you really need them, and keep your in-use batteries charged by using an AC adapter with your PowerBook. These portable AC adapters plug into your PowerBook-500 Series or Duo and any standard 110v power outlet to power your computer without depleting your battery reserves. They're ideal for use in the office, at home, or in a hotel room.



CAT. #	ITEM DESCRIPTION	PRICE
100573	POWERBOOK DUO AC ADAPTER	\$89.95
103129	POWERBOOK 500-SERIES AC ADAPTER	129.95

VST Charger 500™

• Charges two batteries simultaneously in as little as one hour

If you've been experiencing problems with your 500 series PowerBook's Intelligent Batteries, you need the VST Charger 500. If you haven't had any problems yet, the VST Charger 500 will help keep it that way. It uses EMMpathy™ diagnostic software to find and correct memory errors in the battery's Energy Monitoring Module (EMM) that can render the battery useless. It uses your PowerBook's power adapter, or you can purchase the charger bundled with an Apple AC adapter for a special low price. You can also choose the VST Charger 500 and an auto adapter, available separately. Use the VST Charger 500 to monitor, charge, recondition and calibrate Intelligent Batteries for maximum battery performance and cycle-life longevity.



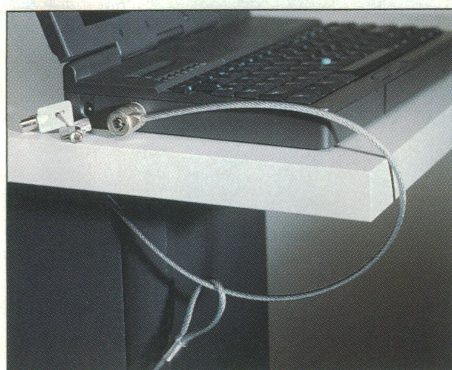
VST 500 Charger

Auto Adapter

CAT. #	ITEM DESCRIPTION	PRICE
100401	VST CHARGER 500*	\$169.95
100402	CHARGER WITH APPLE AC ADAPTER	249.95
105067	AUTO ADAPTER 500 ONLY	88.95

* Requires your PowerBook's power adapter.

Customize Your PowerBook



MicroSaver® Locking Device

MicroSaver is a locking device that helps secure your computer against theft. The lock's head fits into the computer's specially-designed slot and locks firmly in place. The only way to remove it without permanently damaging the computer is with the key. A six-foot galvanized steel cable is attached to the lock. All you need to do is wrap the cable around any immobile object, lock the device to your computer, and you have an inexpensive, easy-to-use theft deterrent. MicroSaver is lightweight and strong, making it an ideal companion for your PowerBook as you travel. It's compatible with PowerBooks 160, 160c, 180, 180c, 190, 520, 520c, 540, 540c, 5300 as well as most newer Macintosh models.

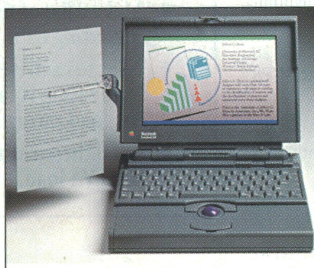
105395 MICROSAVER \$49.95



PowerDoor

You're not alone if you lost the door off the back of your PowerBook 140-180 within the first couple of weeks of hard use. Even if you have enough patience to order a new one, the constant opening and closing seems to ensure that it'll be gone again within a few weeks. The PowerDoor solves that problem. After a quick and simple installation, the PowerDoor provides constant protection of your PowerBook's I/O ports, while allowing open access to your power switch and modem port.

100488 POWERDOOR \$14.95



Notebook Copy Grip

Just attach to any surface on your PowerBook with the adhesive hook and loop fastener provided and you're in business.

100374 NOTEBOOK COPY GRIP \$4.95



UltraDock

- Full-featured portable dock for your Duo
- Provides SCSI, 10Base-T, RGB monitor, and ADB connections

The UltraDock is the ultimate connectivity device for your PowerBook Duo, providing SCSI, network, monitor, audio, and ADB connections in a single portable device. When you travel with your Duo, UltraDock is a definite must, keeping you equipped for any connectivity need. UltraDock's DB-25 connection allows you to connect your Duo to external SCSI devices just like a desktop Mac does, and its RJ45 connection and included 10' patch cable make it easy to connect to a 10Base-T Ethernet network. UltraDock also has an RGB monitor output port that automatically adjusts to the resolution and frequency of your monitor. Audio jacks for connection to external speakers, an ADB port to attach a full-sized keyboard and mouse, and a Duo power supply connection round out UltraDock's connections. UltraDock also supplies a sturdy ledge to support your Duo when it's connected and keeps it at an angle for comfortable keying.

106576 ULTRADOCK \$524.95

PowerBook Accessories



Notebook Magnifier

The Notebook Magnifier works with displays up to 9.5", magnifying them up to 10.5" and providing glare protection. It has folding clips for easy storage in your computer case.

106555 NOTEBOOK MAGNIFIER \$49.95

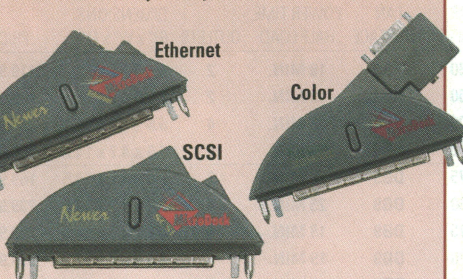
Grip-it Strips

Avoid the costly disaster of dropping your PowerBook or slick-covered peripheral with Grip-it Strips. Use these textured adhesive strips on almost any curved or flat area to provide a non-slip surface. 3-pack includes purple, teal and black strips.



1034-019-012 GRIP-IT STRIPS - 3-PK \$17.95

Get the most from your PowerBook Duo



Ethernet MicroDock

(RJ45 and ADB Connections)

It's the smallest Ethernet docking device available and provides high-speed 10Base-T Ethernet networking capability. It affords Duo users an easy, compact way of connecting to Ethernet networks in the office or on the road. Includes a 10' 10Base-T Ethernet cable and a two-year warranty.

SCSI MicroDock

(HDI-30 and ADB Connections)

A "must have" product which provides the Duo user a lightweight, portable docking module. This innovative marvel allows the Duo to act as both the host computer to a SCSI chain, and "dock" as a hard disk drive to another Mac - without the use of a special cable!

Color MicroDock

(Video, Audio and ADB Connections)

Newer Technology's Color MicroDock delivers 8-bit color from your Duo with full support for VGA, SVGA, LCD displays and Apple monitors up to 16". Larger format Apple monitors are supported in 4-bit mode.

CAT. #	ITEM DESCRIPTION	PRICE
100486	ETHERNET MICRODOCK	\$169.95
100487	SCSI MICRODOCK	\$139.95
100485	COLOR MICRODOCK	\$269.95

APC SurgeArrest Notebook



Perfect for Powerbooks! Small and lightweight, this portable surge suppressor protects both power and telephone lines from surges and noise. It features three phone jacks to provide mobile users a convenient way to protect both their modem and a telephone. The APC SurgeArrest Notebook comes with a \$3,500 connected equipment policy and a manufacturer's lifetime warranty.



106666 APC SURGE ARREST NOTEBOOK \$19.95



APS PB PowerTool Kit

The handiest, most compact tool we've seen, our PB PowerTool tool kit lets you get inside that PowerBook 1XX or Duo with the tools you really need. Locking hex extension, small flat bit, Phillips #2 bit and Torx T-8 and T-10 all fit neatly and compactly in the molded handle.

100604 PB TOOL \$9.95

Surge Protection & UPS

Back-UPS Office

by Steven Bobker

Pop quiz. You're excused if you have a reliable surge suppressor and an uninterruptible power supply.

Question 1. What happens if building power suddenly fails?

If you're lucky you lose unsaved work. If you're unlucky, parts of your hardware fail. Either way, the best result is a major PITA.

Question 2. What happens if your local power company goof's and a large surge or spike comes down the lines (mine does this too often)?

Fried hardware is the usual result. Cheap power strips might stop a surge once, but they wear out and many out there won't stop that first surge, much less the second. You also lose unsaved work.

You need a fast-acting surge protector that can take many hits, and you need enough battery power to give you time to save and shut down. Surge protectors work by cutting off power — they instantly isolate your hardware from the nasty stuff on the electrical lines.

Devices that do exactly that have long been available. They are bulky, heavy, and generally awkward to use. Plus the best — you only want the best — are not that cheap. That adds up to too many unprotected PCs.

Take a good look at the Back-UPS Office. It looks like an ordinary power strip on way too many steroids. Its six plug sockets are placed to allow for wide transformers and there's enough battery power to let you save and shut down a complex workset of programs. It can be wall mounted or placed on the floor, and there's even an audible power failure alarm (which could be louder). Its technology is well proven (the maker, APC, is the leader in the field) and there's an excellent 2-year, \$25,000 loss replacement guarantee. The size and ergonomics are right, and so is the price.

Most important, it works. When I pulled the plug on my double hard drive, loaded 7500 with a 17-inch monitor, Back-UPS Office gave me more than 7.5 minutes to save and shut down.

The Back-UPS Office is the best surge arrest and UPS solution so far for the small office and individual users.



Back-UPS®

This affordable, reliable series of UPS units is designed to protect workstation or network servers against damaging blackouts, brownouts, surges and lightning.

Back-UPS® Pro™

For advanced workstations, the Back-UPS Pro series of UPS units provides microprocessor-controlled active voltage regulation ensuring a smooth, continuous power flow to your system.

Smart-UPS®

This high-performance series is perfect for file servers, minicomputers, Internet hubs and other equipment where absolute reliability is a must. There's an informative LED display so you can check status at a glance as your UPS protects your equipment from power surges and brownouts as well as complete power loss.

PowerChute for Macintosh®

This software package and serial cable combination will safely perform the unattended shutdown of your system and your APC UPS in the event of a power failure. Includes serial cable.

105014 POWERCHUTE FOR MAC* \$79.95

How Much UPS is Enough?

- Make a list of the devices that you need to protect with a UPS including CPU, monitor, external hard drives, etc.
- Next to each item, put its nameplate rated VA (volt-amp rating). If the load rating is in watts, multiply wattage rating by 1.4 to equal VA. If the load rating is in amps, multiply this number by 120 to obtain VA.
- Total these ratings and choose a UPS with a VA rating greater than the total VA load.

CAT. #	ITEM DESCRIPTION	OUTPUT VA	CAP. WATTS	LAN INTERFACE	POWER TIME HALF LOAD	OUTLETS	DIMENSIONS (H" x W" x D")	PRICE
101823	BACK-UPS BK280	280	180	DB9	18 MIN.	2	6 x 3.4 x 13.1	\$119.95
101824	BACK-UPS BK400	400	250	DB9	19 MIN.	2	6 x 3.4 x 13.1	169.95
101825	BACK-UPS BK450	450	300	DB9	28 MIN.	4	6.6 x 4.7 x 14.2	189.95
101826	BACK-UPS BK600	600	400	DB9	22 MIN.	4	6.6 x 4.7 x 14.2	259.95
101829	BACK-UPS PRO 280	280	175	DB9	20 MIN.	2	6.6 x 4.7 x 14.5	169.95
101830	BACK-UPS PRO 420	420	260	DB9	25 MIN.	4	6.6 x 4.7 x 14.5	239.95
101831	BACK-UPS PRO 650	650	410	DB9	18 MIN.	4	6.6 x 4.7 x 14.5	299.95
106030	BACK-UPS PRO 1000	1000	670	DB9	19 MIN.	6	8.5 x 6.7 x 17.2	399.95
105185	BACK-UPS PRO 1400	1400	950	DB9	19 MIN.	6	8.5 x 6.7 x 17.2	499.95
101833	SMART-UPS SU700	700	450	DB9	17 MIN.	4	6.6 x 4.7 x 14.5	389.95
101834	SMART-UPS SU1000	1000	630	DB9	20 MIN.	6	9.1 x 6.9 x 17.8	579.95
101835	SMART-UPS SU1400	1400	950	DB9	21 MIN.	6	9.1 x 6.9 x 17.8	699.95
105186	SMART-UPS SU2200*	2200	1600	DB9	30 MIN.	8	17 x 7.7 x 21.5	1,129.95

* Requires 20 amp service. You'll need a certified electrician to install a 20 amp 5-20R receptacle to accommodate this unit. (All APC units shipped via UPS)

Back-UPS® Office™

- UPS and surge protection in one unit
- Single-device protection helps prevent harmful line noise

It's the ultimate power protection unit for your computer workstation, combining a UPS and a surge protector into a single, compact unit. The new Back-UPS Office supplies premium power protection through six outlets, three of which provide instantaneous battery backup, and the remaining three of which deliver spike and surge protection only. Two of the outlets are spaced to accommodate large transformer block plugs. The unit includes a protected RJ11/45 receptacle as well.

Use Back-UPS Office's three battery backup outlets for your CPU, monitor, and an external storage device so you can safely shut down in the event of a blackout. Attach remaining peripherals to the three surge protected outlets. Connect a phone or data line through Back-UPS Office to completely safeguard your system.

The battery which powers the UPS portion of the Back-UPS Office is user replaceable, lasting three to six years under normal usage. It has enough power to keep a Macintosh Performa CPU and a 15" monitor running for seven to 13 minutes. The Back-UPS Office is backed by a two-year warranty and carries APC's \$25,000 connected equipment policy.



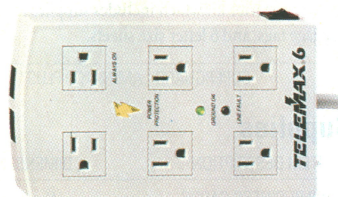
The Surge Stops Here

PANAMAX®

TELEMAX 6

Protect your electronics and one phone line with the TELEMAX 6. It gives you six AC outlets, one fax/modem outlet and a seven foot phone cord. TELEMAX 6 comes with a manufacturer's \$5 million connected equipment warranty.

100338	TELEMAX 6	\$59.95
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SUPERMAX

Shield your system with complete surge and spike protection for your modem, fax and home system with the SUPERMAX. It has five protected AC outlets, one always-on outlet and one modular phone jack receptacle for your fax/modem. SUPERMAX is backed by a \$5 million connected equipment warranty.

100335	SUPERMAX	\$79.95
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MAX 5000

Keep power control and surge protection for your entire system at your fingertips. It is an under-the-monitor power controller with 5 AC outlets, a master power control and LED indicator lights that can be customized to your needs with the addition of the MAX TEL/1 and MAX LAN UTP snap-in modules. Manufacturer's \$25,000 connected equipment warranty.

100339	MAX 5000	\$69.95
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MAX TEL/1

MAX LAN UTP

Customize your MAX 5000 or MAX 6 surge protection system with our snap-in modules. The MAX TEL/1 module adds phone line surge suppression while the MAX LAN UTP gives protection to your incoming data lines.

CAT. #	ITEM DESCRIPTION	PRICE
100342	MAX TEL/1	\$22.95
100333	MAX LAN UTP	22.95



Professional SurgeArrest®

The Professional SurgeArrest series is a great value for high end home office equipment including laser printers, laptops and telephone/modems. Each unit has a six foot cord and protects seven outlets from surges up to 320 joules, with EMI/RFI filtering. The Professional SurgeArrest devices provide multi-stage surge protection by using the combined strength of several components for superior overall protection. They are equipped with a fuse that reacts quickly to lightning strikes and other catastrophic surges to shut off power and prevent other damaging surges from reaching your equipment. The Pro7T additionally protects a fax or modem line, and the Pro7C also protects a cable television (COAX) line. Covered by a lifetime equipment warranty and a \$10,000 connected equipment protection policy.

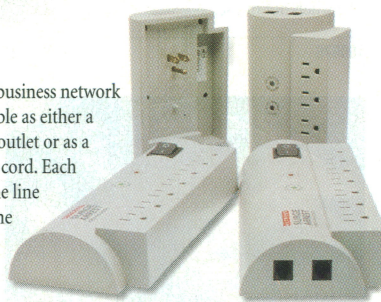
CAT. #	ITEM DESCRIPTION	PRICE
106216	PROFESSIONAL SURGEARREST PRO7	\$29.95
106217	PROFESSIONAL SURGEARREST PRO7T (W/TEL)	39.95
106218	PROFESSIONAL SURGEARREST PRO7C (W/COAX)	42.95



Network SurgeArrest®

Use this line of surge suppressors to protect business network systems from damage. These units are available as either a three-outlet which plugs directly into a wall outlet or as a seven-outlet model with a six foot extension cord. Each size is also available with integrated telephone line protection for modems and fax machines. The Network SurgeArrest suppressors provide high-quality surge protection from up to 480 joules. Covered by a lifetime equipment warranty and a \$25,000 connected equipment protection policy.

CAT. #	ITEM DESCRIPTION	OUTLETS PROTECTED	PRICE
106212	NETWORK SURGEARREST NET 3	3	\$24.95
106213	NETWORK SURGEARREST NET 3T (W/TEL)	3	44.95
106214	NETWORK SURGEARREST NET7 WITH 6' CORD	7	37.95
106215	NETWORK SURGEARREST NET7T (W/TEL) WITH 6' CORD	7	59.95



PowerManager™

This surge suppressor protects six outlets from surges of up to 480 joules with instant surge response. Four outlets inside the unit take advantage of the internal cord bay where you can neatly coil excess cord length. Another outlet extends from the back of the PowerManager, accommodating a block transform plug. All five outlets are controlled by an easily-accessible master switch on the front of the unit. Three of the outlets also have individual power controls. The sixth outlet on the side of the PowerManager provides convenient desktop power access and is always on. The PowerManager-T also protects a telephone connection through RJ45/RJ11 jacks. Covered by a lifetime equipment warranty and a \$25,000 connected equipment protection policy.

CAT. #	ITEM DESCRIPTION	PRICE
106282	POWERMANAGER - WHITE	\$69.95
106209	POWERMANAGER - GREY	69.95
106210	POWERMANAGER-T (W/TEL) - WHITE	84.95
106211	POWERMANAGER-T (W/TEL) - GREY	84.95



Surge Protection & UPS

(Glossary Continued from page 38)

to a specific location on the media. Average seek times are the average of a large number of random samplings all over the media. Seek time is CPU independent, meaning that seek time is unaffected by the computer to which the drive is attached.

Sequential Access: a condition in storage devices wherein data can only be accessed in the order it was written. A request for data from the middle of a tape, for example, requires a scan of the entire first half of the tape, or reference to a catalog block or file to identify the location of the data, prolonging the average access time for sequential devices. See Random Access

SIMM (Single In-line Memory Module): the physical RAM configuration utilized in desktop Macintosh computers.

Spindle Speed: the speed at which a rotating media drive's disk(s) spin, expressed in RPMs. In general, drives with faster rotational speeds can achieve higher transfer rates because data is passes the read/write head at a greater rate.

Synchronous, -ly: refers to system commands in the Macintosh, such as a format, which require the supervision of the CPU. During a synchronous format, the computer is unable to respond to subsequent commands (printing, typing, launching another application, etc.) until the initial command is completed. It also refers to a mode of SCSI operation where the bytes can be sent in rapid succession without the need for acknowledgment before sending the next byte. See Asynchronous

Terabyte, TB: 1024 gigabytes, or 1,109,511,627,776 bytes. When referring to storage capacity, a terabyte is sometimes truncated to 1,000,000,000,000 (one trillion) bytes for ease of use (APS uses the true number).

Termination: The process of ensuring that the communication signals traveling over the SCSI bus have distinct high and low levels and eliminate noise. A SCSI chain improperly terminated will not function correctly. Proper termination requires a terminator at each end of the SCSI chain.

Thermal Calibration (T-Cal): is necessary in all drives without embedded servos. As the disk heats up during operation, it expands changing the relative locations of the data heads and

Continued on page 53)

800-374-568
24 Hours a Day, 7 Days a Week

Office Essentials



Telephone Desk Stands

Now you can have an attractive, functional desktop organizer without sacrificing any additional desk space. These stylish telephone desk stands are made from heavy-duty clear acrylic. The stand has two functional purposes – it will hold your telephone, and it gives you a built-in space for storage. The handy storage space is located underneath where the phone is held and is a 3.25" high area where you can store telephone books or notepads.



CAT. #	ITEM DESCRIPTION	PRICE
105413	ANGLED TELEPHONE STAND (PICTURED)	\$21.95
105412	TELEPHONE STAND	21.95

Seiko Smart Label Printer EZ30

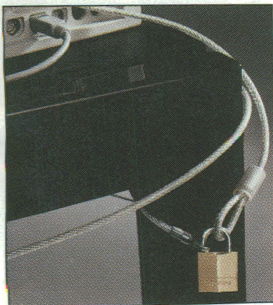
Professional quality envelope and file folder labels are easy to create with the Seiko Smart Label Printer EZ30. It is the perfect accessory for your Mac or PowerBook whether you print labels one at a time or by the bushel. It uses thermal printing technology to produce crisp labels that can combine text, graphics and even POSTNET™ bar coding. You can draw label information from your own database or word processing program, or use the database that's included in the printer's software. This label printer also comes with a serial cable, a power supply and a roll of 1.125" x 3.5" address labels.



CAT. #	ITEM DESCRIPTION	PRICE
105050	SEIKO SMART LABEL PRINTER EZ30*	\$129.95
105051	ADDRESS LABELS (2 ROLLS, 130 LABELS EA., 1.125" x 3.5")	9.95
105052	CLEAR LABELS (250 LABELS)	14.95
105053	ASSORTED COLOR LABELS 4-PACK (1 ROLL EACH OF YELLOW, BLUE, GREEN AND PINK; 130 PER ROLL)	24.95

Apple Security Kit

Protect your computer system from theft. The Apple Security Kit uses the security slots that are built-in to most Macintosh and Performa desktop computers, monitors and keyboards to firmly attach your hardware to an immovable object. The kit includes two small security brackets, two keyboard loops, an 8' galvanized steel cable wire, a Master® Lock padlock with two keys and instructions for assembly.



105396	APPLE SECURITY KIT	\$39.95
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*APS 30-day money-back guarantee does not apply. Products covered by manufacturer's warranty.

SuperGuard Laminator Plus

Seal important documents in an airtight, water-proof vinyl casing using the SuperGuard Laminator Plus. This value-priced professional-quality laminator accepts pages up to 9" wide. The laminator uses a four-roller laminating system to accommodate a variety of page thicknesses, and provides easy operation without carriers or temperature control adjustments. The SuperGuard Laminator Plus comes with a starter kit which includes supplies to laminate 12 - 4" x 6" sheets, 12 business cards, 6 luggage tags, and 6 letter size sheets.

Starter Kit included



106525	SUPERGUARD LAMINATOR PLUS*	\$124.95
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Laminator Supplies

CAT. #	ITEM DESCRIPTION	DIMENSIONS	PRICE
106527	100 BUSINESS CARDS	4" x 6.25"	\$19.95
106528	50 LUGGAGE TAGS	6.25" x 9"	24.95
106529	100 4" x 6" SHEETS	4.75" x 8.5"	24.95
106530	50 LETTER SIZE SHEETS	9.5" x 13.5"	29.95
106531	50 LEGAL SIZE SHEETS	9.5" x 16.5"	34.95
106532	STARTER KIT*	—	11.95

*The Starter Kit includes supplies to laminate 12 - 4" x 6" sheets, 12 business cards, 6 luggage tags, and 6 letter size sheets.



Powershred Shredders

Keep your confidential documents confidential by shredding them with a Powershred Shredder. Both feature an automatic start / stop system that will handle 5 pages at a time and up to 20 feet of documents per minute. If one of the shredders ever happens to jam, it will automatically shift to reverse to try and correct the jam without user intervention. The Powershred Straight-Cut Shredder pulverizes your documents into unreadable 7/32" wide strips. The Powershred Cross-Cut Shredder delivers extra security by virtually obliterating your documents into unreconstructible 5/32" x 1" particles. Both shredders come with their own wastebasket, so all you have to do is plug it in and you're ready to shred. Includes a one-year manufacturer's warranty.

CAT. #	ITEM DESCRIPTION	PRICE
106602	(A) DELUXE PERSONAL CROSS-CUT SHREDDER (PS60CC)*	\$219.95
106050	(B) POWERSHRED STRAIGHT-CUT SHREDDER*	99.95

Copy Holder

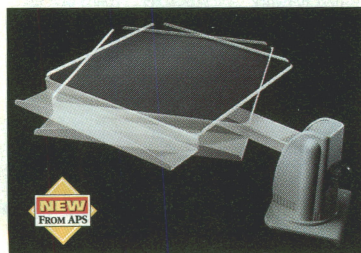
Reduce eye fatigue by raising your copy to monitor level. The copy holder's foam tape adheres to either side of your monitor, and its arm pivots out of the way when not in use.



100676	COPY HOLDER	\$5.95
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Monitor Arm

This device raises your monitor above your desktop, freeing valuable workspace. The 360 degree rotation of the arm and platform coupled with its three-position height adjustments give you complete control over the positioning of your monitor. It clamps to your desk's overhang and supports monitors up to 50 lbs. on its 11.5" x 11.5" platform. If your desk doesn't have at least a 2" overhang,



use the Adjustable Extension Clamp to mount the Monitor Arm. It expands up to 22".

CAT. #	ITEM DESCRIPTION	PRICE
106600	MONITOR ARM	\$49.95
106601	EXTENSION CLAMP	44.95

Make Your 15" Monitor Look Like 17"

Accessories

Glare Filters

Reduce eye strain and headaches with a Contour Glare Filter. They fit most flat and curved 12" to 21" landscape monitors and improve contrast while reducing glare up to 99.6% for easier monitor viewing. The filters also have special coatings and a grounding cord to reduce almost 100% of the radiation and static given off by your monitor. The filters slip over your monitor and form a tight seal against light and dust, and lift off for easy cleaning.

Designers and others who work with color will want to choose the Flip-top glare filter. In addition to excellent glare, static and radiation protection, it lifts up easily to check the true screen color of your designs and illustrations. The Flip-top fits most 12" to 15" landscape monitors and is fully adjustable for perfect positioning on your monitor.



Contour

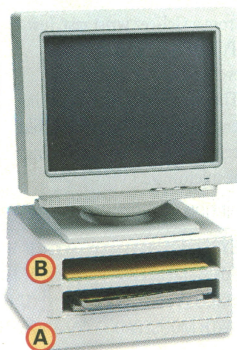


Flip-top

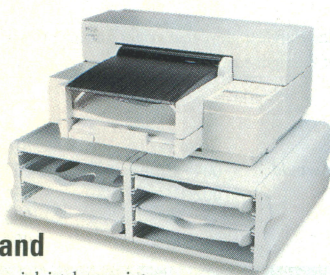
CAT. #	ITEM DESCRIPTION	PRICE
105241	FLIP-TOP GLARE FILTER FOR 12" TO 15" MONITORS	\$59.95
105242	CONTOUR GLARE FILTER FOR 12" TO 13" MONITORS	69.95
105243	CONTOUR GLARE FILTER FOR 14" TO 15" MONITORS	79.95
105244	CONTOUR GLARE FILTER FOR 16" TO 17" MONITORS	99.95
106363	CONTOUR GLARE FILTER FOR 20" TO 21" MONITORS	129.95

VuRysers & VuRysers 2

Use one or more of these sturdy, stacking monitor stands to raise your monitor so the top of the screen is at eye level – the proper viewing level for any monitor. Original VuRysers raise the monitor one inch, VuRysers 2 raise the monitor two inches and offer a small storage area. Bone white.



CAT. #	ITEM DESCRIPTION	PRICE
100409	A VURYRSERS	\$4.95 EA.
106361	B VURYRSERS 2	4.95 EA.



Ink Jet & Laser Printer Stand

Support almost any ink jet, laser printer or fax on this handy new printer stand from Fellowes. It includes two paper trays with multiple height adjustments to accommodate standard letter or legal size paper. The stand comes fully-assembled and features a built-in cable management system. (5" H x 18.875" W x 14" D)

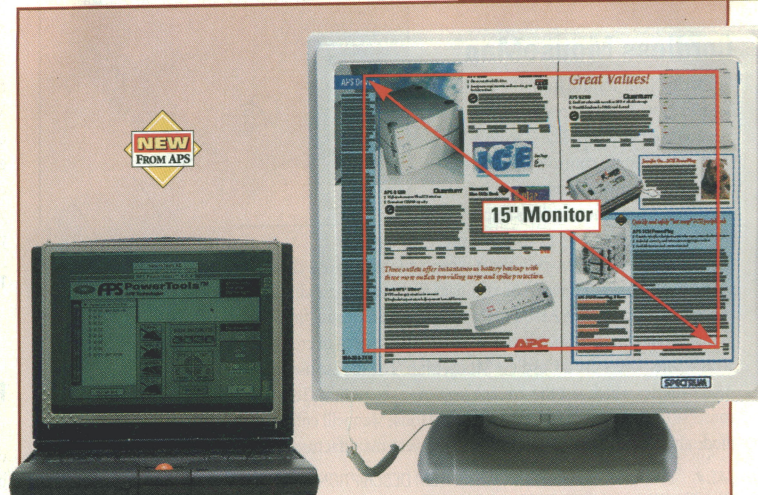
106392	INK JET AND LASER PRINTER STAND	\$39.95
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Monitor Organizer With Drawer

Raise your monitor to a comfortable viewing level and expand your storage options with this multi-functional Monitor Organizer. The unit comes preassembled and can support up to a 50 pound monitor. Its wide drawer is raised to open easily over your keyboard. You can keep media, office supplies, almost anything conveniently in front of you. Stores up to 225 3.5" diskettes, 72 4mm tapes or 66 3.5" optical disks (8.5" H x 15" W x 13.5" D)

105270	MONITOR ORGANIZER	\$49.95
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NoteBook Magnifier

Image simulated

Glare Screen Magnifier

Glare Screen Magnifier & Notebook Magnifier

Give your monitor the appearance of a larger monitor without any distortion by using a screen magnifier. The Glare Screen Magnifier works with most 14" and 15" landscape monitors, giving them the appearance of a 17" monitor. The Notebook Magnifier works with displays up to 9.5", magnifying them up to 10.5". Both screen magnifiers provide glare protection, and the Glare Screen Magnifier helps drastically reduce static electricity and radiation.

CAT. #	ITEM DESCRIPTION	PRICE
106554	GLARE SCREEN MAGNIFIER	\$119.95
106555	NOTEBOOK MAGNIFIER	49.95



klear screen™ & klear kloth™

Safely clean delicate plastic and glass surfaces with klear screen and klear kloth. They are specifically formulated to cleanse monitors, PowerBook and Newton displays and high-tech optical equipment. In fact, they're the only cleaning supplies to be sold in the Apple company store, and the only cleaners to have ever shipped with the Newton. The klear screen cleanser contains no alcohol or harsh abrasives. Instead, it uses safe cleaners and lubricants to lift and dissolve most contaminants and float them off of the surface, leaving behind a clear anti-static coating.

CAT. #	ITEM DESCRIPTION	CONTENTS OF PACKAGE	PRICE
100458	KLEAR SCREEN TRAVEL KIT	6 klear kloth and 2 oz. spray	\$7.95
100459	KLEAR SCREEN SPRAY	8 oz. bottle holds over 1,000 applications.	9.95
100457	KLEAR KLOTHS	6 lint-free 11" x 12" reusable klear kloth.	5.95
100460	KLEAR DUO KIT	6 klear kloth saturated with klear spray and 6 dry klear kloth.	4.95
100490	POWER KLEAN KIT	2 oz. screen spray; 8 oz. screen spray; 2 pkgs. klear kloth; 2 klear duos kits	29.95

800-374-568
24 Hours a Day, 7 Days a Week

Control Devices

Cordless MouseMan®

Unshackle your mouse from the cord that holds it captive – and creates a tangled mess on your desktop. The Cordless MouseMan mouse controls your cursor using radio transmissions, not an infrared beam like many other cordless mice, allowing you to use it up to six feet away from its receiver. You can even use it when you don't have a clear, straight path to the receiver. The compact receiver you use simply attaches to any available ADB port. The mouse can choose from four separate channels so you can use your mouse even in crowded areas where others use a Cordless MouseMan. The mouse uses two AAA batteries which last the average user over six months. To help conserve the battery energy, the Cordless MouseMan will enter a sleep mode after ten seconds of inactivity. Three-year manufacturer's warranty.

CAT. #	ITEM DESCRIPTION	PRICE
106052	CORDLESS MOUSEMAN	\$69.95



Alps Adjustable Mouse

Hands come in all sizes – but until now mice were “one size fits all.” Introducing the Alps Adjustable Mouse, the first mouse that adjusts to you. The Alps Adjustable Mouse features an adjustable shell that expands or contracts to fit various sized hands. Using the included full-featured software driver, you can customize the Alps Adjustable Mouse to meet your needs. You can assign time-saving shortcuts to any of its three buttons or to a combination of buttons. Built with high-quality components, the Alps Adjustable Mouse comes with a manufacturer's limited lifetime warranty.

106614	ALPS ADJUSTABLE MOUSE	\$39.95
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ALPS GlidePoint

Controlling your Mac's cursor has never been easier – or more intuitive – than it is with this input device. Simply glide your finger across the touchpad surface, and the on-screen cursor follows. To select or double-click, lightly tap the touchpad, or use any of the three buttons. This input device replaces your mouse or trackball and attaches to an ADB port. The thin, compact design makes it perfect for use on-the-go with your PowerBook as well as with any desktop Mac.

101577	ALPS GLIDEPOINT	\$49.95
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Turbo Mouse 5.0

Be even more productive with Turbo Mouse. The included software has been updated to provide you even more time and effort saving options, like personalized pop-up menus. The design of the Turbo Mouse itself has also been altered to a four-button design. The large trackball in the Turbo Mouse still gives you the smooth, continuous movement you've come to expect, resulting in an input device that lets you work as quickly and accurately as possible. Five-year manufacturer's warranty.

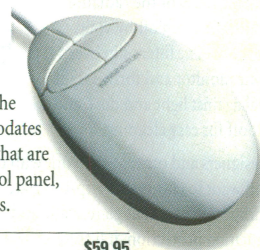
105303	TURBO MOUSE 5.0	\$104.95
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Kensington Mouse

Wrap your hand around this two-button mouse and feel the comfort of an ergonomically designed mouse. It accommodates both right- and left-handed users with oversized buttons that are easy to hit with long or short fingers. In the mouse's control panel, you can save customized button settings and create macros.

105094	KENSINGTON MOUSE	\$59.95
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Gel-eez™ Wrist Rests

Squishy comfort. It's what you get from a Gel-eez wrist rest. Just put one in front of your keyboard, PowerBook or mouse, and you'll experience squishy comfort every time you take a break from typing or using your mouse. The wrist rest conforms to the shape of your wrist and provides gentle support. If you need cold therapy, just put the wrist rest in a refrigerator for cool, soothing comfort. (Not recommended for the microwave.)



CAT. #	ITEM DESCRIPTION	DIMENSIONS	PRICE
106032	GEL-EEZ FOR KEYBOARDS	1" H x 19" W x 4" D	\$9.95
106033	GEL-EEZ FOR NOTEBOOK COMPUTERS	1" H x 11" W x 4" D	8.95
106034	GEL-EEZ FOR MOUSE	1" H x 8" W x 4" D	7.95
106035	GEL-EEZ FOR MOUSE WITH MOUSEPAD	1.25" H x 8" W x 9.5" D	9.95

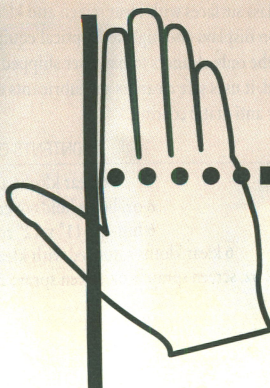
Help for Your Hands



Handeze® Gloves

Handeze gloves help relieve hand pain associated with extensive keyboard use by keeping your hand in a neutral position while allowing flexibility. These fingerless stretch Lycra gloves provide warmth, support and massage to keep you comfortable at the keyboard.

It is, however, imperative to purchase the correct size. To find the Handeze glove that's right for you, place your hand on the size chart below as illustrated. Your size is revealed in the box at the right edge of your hand.



1015-COLOR - SIZE \$19.95
Sample: Blue, medium size gloves would be catalog number 1015-004-004.

Colors:
004- Blue
002- Beige

Size:
003 - Small
004 - Medium
005 - Large
006 - XLarge

HANDEZE® GLOVES SIZE CHART

50

800-374-5681

1/4 Hours a Day, 7 Days a Week

Step 1.

Place your right hand, palm-down with the first finger along this line.

Step 2.

Your glove size is in the box at the right edge of your hand.

3	4	5	6
S	M	L	XL

Fight Fatigue and Improve Keying Comfort

ADESSO
Input Specialists

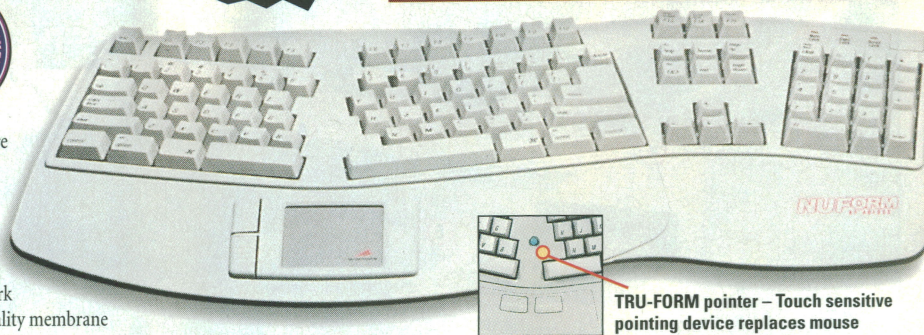


Keyboard Environments

Adesso NUForm Keyboards

We're all looking for that extra little edge to help us work faster and more productively so we can spend more time with the things that fuel our dreams. When it comes to working with your Mac, the new Adesso NUForm keyboard gives you that competitive edge. Its built-in wrist support, split keyboard design, and ergonomically shaped keypad encourages your hands to fall into a more natural keying position, combating fatigue, and improving comfort to let you complete your work sooner. NUForm's extended keyboard layout uses 106 durable, high-quality membrane keyswitches and includes separate, ergonomically positioned numeric and cursor keypads, function keys, and page movement keys. The keyboard comes with a 4.5' ADB cable and supplies 2 additional ADB ports for other devices to use.

The Adesso NUForm keyboard is available in Basic, Touchpad, and Pointer Button configurations. The Touchpad version supplies a built-in touchpad by Cirque® which acts as a mouse. Finger motion and pressure along the touchpad are translated into mouse movements and clicks. The Adesso NUForm Pointer Button version uses an integrated touch-sensitive, isometric two-button pointer to control your Mac. Both the Touchpad and Pointer Button versions help increase your productivity even further by allowing you to keep your hands on the keyboard for all keying and mousing activity.



TRU-FORM pointer – Touch sensitive pointing device replaces mouse

CAT. #	ITEM DESCRIPTION	PRICE
106565	ADESSO NUFORM KEYBOARD – TOUCHPAD (PICTURED)	\$99.95
106566	ADESSO NUFORM KEYBOARD – BASIC	69.95
106567	ADESSO NUFORM KEYBOARD – POINTER BUTTON (INSET)	84.95



Fellowes Dusting Gas

Whether you realize it or not, dust and debris have found a home in your sensitive electronic equipment. One of the easiest ways to remove it is by using Fellowes Dusting Gas. You can choose either the 10 oz. or 2.75 oz. can of compressed gas to blasts dust and debris off of your equipment. Both cans include an extension tube so you can get to tight spaces.

CAT. #	ITEM DESCRIPTION	PRICE
105298	FELLOWES DUSTING GAS – 10 OZ.	\$10.95
105307	FELLOWES DUSTING GAS – 2.75 OZ.	4.95



Underdesk Adjustable Keyboard Drawer

Make your keyboard height conform to your preference for comfortable keying by choosing among five height positions on the underdesk keyboard drawer. The comfortably padded wrist rest conceals a handy compartment to keep small office items at your fingertips. When you're not using the keyboard, the drawer tucks neatly under your desktop. It accommodates keyboards up to 2.5" H x 20.5" W x 10.5" D.

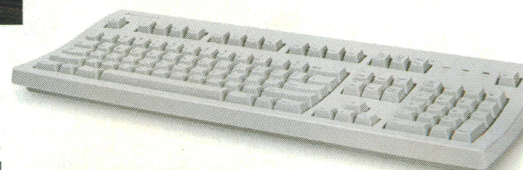
CAT. #	ITEM DESCRIPTION	PRICE
101193	KEYBOARD DRAWER-PLATINUM	\$79.95
101194	KEYBOARD DRAWER-BLACK	79.95
101544	OPTIONAL MOUSE TRAY	19.95



Jennifer On... Adesso NUForm

After a long day at the keyboard, my paws used to be so tired I couldn't even enjoy a good bone. In fact, the keyboard was beginning to take such a toll on me that I considered giving up the career I love and entering law

school. The day was saved though, when I found an incredible new keyboard that helps fight Canine Paw Fatigue (CPF). The Adesso NUForm keyboard has a wonderfully contoured, sloped design that closely matches the natural resting position of my paws. The built-in adjustable wrist rest is a big plus too, supporting my tender paws at just the right height for ideal comfort. The Adesso NUForm keyboard is so comfortable for me in fact, that I plan to go for a new land-speed keyboard record early next year. Bottom line: Adesso NUForm is more comfortable to use than any other keyboard I've ever used, and the innovative ergonomic design may even help prevent CPDS (Canine Paw Distress Syndrome). You should try it!



MacALLY Keyboard

It's amazing how good a new keyboard feels – especially a keyboard with the look and feel of your original equipment. The economical MacALLY Keyboard has a durable, ergonomic 105-key design that includes 15 function keys to help speed you through your applications. It's so close to Apple's original, you may have trouble telling them apart.

100454	MACALLY KEYBOARD	\$79.95
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RING KING®

Keyboard Cradle

Save your wrist while you save desktop space with the ergonomic Keyboard Cradle. It mounts underneath your desktop and keeps your keyboard adjusted from a 15° backslope to a flat orientation to keep your wrists in a neutral position as you type. It also gives you a comfortable supporting wrist pad and 1/4" incremental height adjustments up to 3". Includes mounting hardware and instructions. (7.25" H x 19.5" W x 18" D)

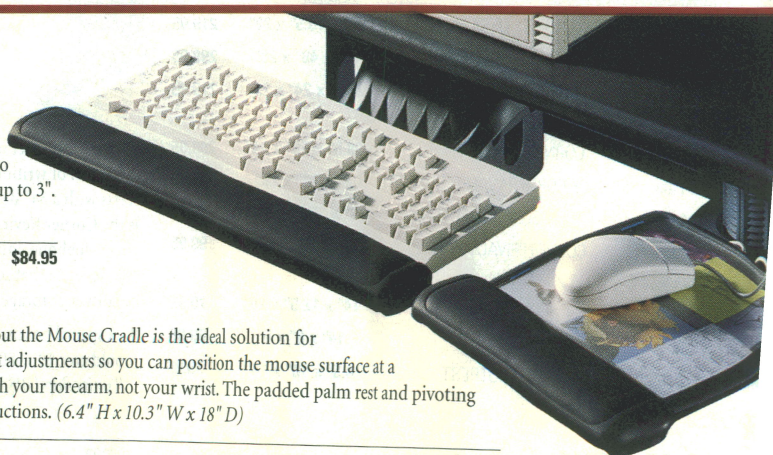
105251	KEYBOARD CRADLE	\$84.95
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Mouse Cradle

Your neck, shoulder, arm and wrist can all be strained by repetitive mouse movements, but the Mouse Cradle is the ideal solution for comfortable mousing. It extends from beneath your desktop and has a 3" range of height adjustments so you can position the mouse surface at a level where your arm hangs freely at your side and your mouse movements are made with your forearm, not your wrist. The padded palm rest and pivoting mouse surface offer added comfort and support. Includes mounting hardware and instructions. (6.4" H x 10.3" W x 18" D)

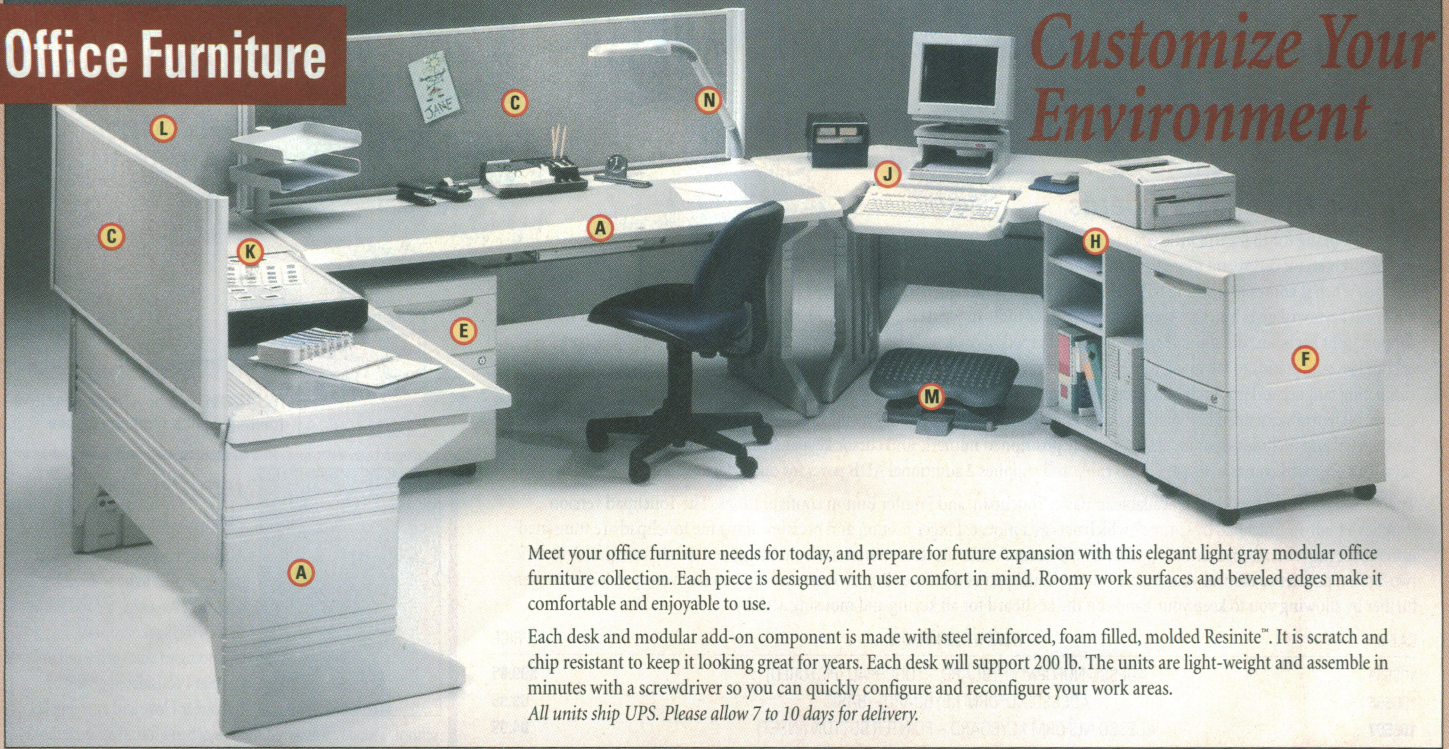
105252	MOUSE CRADLE	\$54.95
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Products on these pages are not covered by APS' 30-day money-back guarantee. Product are covered by manufacturer's warranty.



Office Furniture

Customize Your Environment



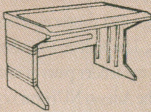
Meet your office furniture needs for today, and prepare for future expansion with this elegant light gray modular office furniture collection. Each piece is designed with user comfort in mind. Roomy work surfaces and beveled edges make it comfortable and enjoyable to use.

Each desk and modular add-on component is made with steel reinforced, foam filled, molded Resinite™. It is scratch and chip resistant to keep it looking great for years. Each desk will support 200 lb. The units are light-weight and assemble in minutes with a screwdriver so you can quickly configure and reconfigure your work areas.

All units ship UPS. Please allow 7 to 10 days for delivery.

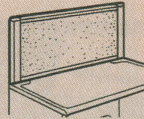
A Desk

The desk is the cornerstone of any set-up. These desks have spacious 28.5" deep work surfaces. A pencil drawer is standard on 48" and 60" desks.



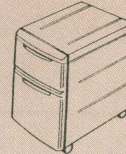
C Privacy Panel

The panel has two main functions. It keeps your work area secluded and private, and doubles as a bulletin board.



E File Cabinet Under Desk

The cabinet rolls on four casters and has two drawers, one for legal / letter size documents, and a 8.75" high utility drawer.



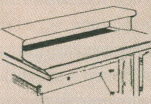
H CPU / Laser Cart

This two-shelf cart holds your CPU and your printer and supplies. It has four casters for easy mobility.

See picture above

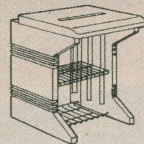
B Shelf

The desktop shelves sit 7.5" above the desktop, providing additional storage space for books and manuals.



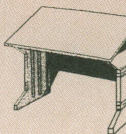
D Printer Stand

The stand accommodates laser, ink jet and dot matrix printers. It has two lower wire shelves to hold paper.



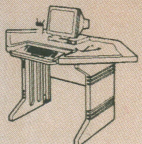
G Layout Table

The top has an angle adjustment from horizontal to 40° with 17 settings. The scratch-resistant surface measures 48" x 28".



J Corner Keying Unit

This unit is perfect for anyone who has extensive computer contact. It has a 21" x 13.5" adjustable keyboard shelf.



KEY	CAT. #	ITEM DESCRIPTION	H x W x D	PRICE
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DESKS AND ADD-ONS

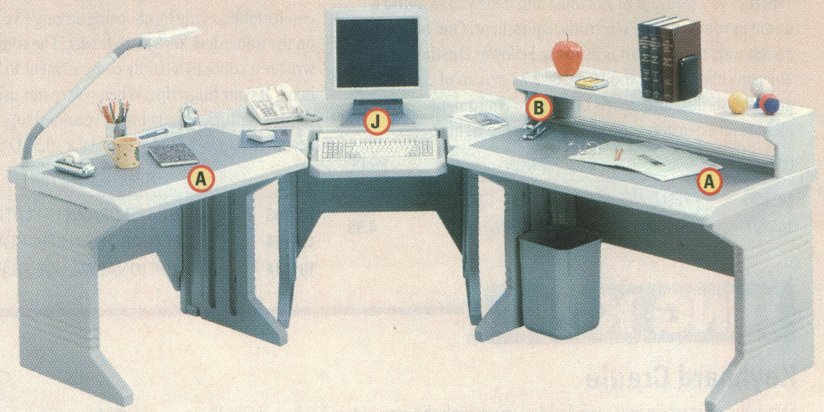
A	106017	60" DESK	28.5" x 60" x 28"	\$319.95
B	106018	60" DESKTOP SHELF	7.5" x 60" x 12"	124.95
C	106019	60" PRIVACY PANEL	20" x 60" x 1"	99.95
A	106020	48" DESK	28.5" x 48" x 28"	279.95
B	106047	48" DESKTOP SHELF	7.5" x 48" x 12"	119.95
C	106063	48" PRIVACY PANEL	20" x 48" x 1"	89.95
A	106015	34" DESK	28.5" x 34" x 28"	239.95
B	106041	34" DESKTOP SHELF	7.5" x 34" x 12"	114.95
C	106042	34" PRIVACY PANEL	20" x 34" x 1"	79.95
D	106043	PRINTER STAND	28.5" x 24" x 26"	199.95
E	106044	FILE CABINET UNDER DESK	24" x 15.5" x 22"	209.95
F	106045	FILE CABINET DESK HEIGHT	28" x 15.5" x 22"	219.95
G	106014	LAYOUT TABLE	28" x 48" x 28"	299.95
H	106016	CPU / LASER CART	29.5" x 24" x 22"	219.95

CORNERS

J	106013	CORNER KEYING UNIT	28.5" x 58" x 34"	299.95
	106300	SQUARE CORNER W/ LEG SUPPORT	2" x 28" x 28"	149.95
K	106040	TRIANGLE CONNECTOR	2" x 38.5" x 28"	89.95
L	106301	CORNER PRIVACY PANEL	20" x 38.5" x 1"	99.95

ACCESSORIES

	106046	MONITOR ARM	14" x 12.5" x 20"	79.95
N	106064	TASK LIGHT	14" x 8" x 6"	69.95
M	106153	PLUS FOOTREST	4.5" x 18" x 14"	39.95



This is the perfect workstation layout for a small office, a corner, or a cube configuration. It features a full seven feet of writing surface along with a corner unit for your monitor and keyboard. The workstation starts with a 34" desk (A) which is great for small tasks or work-in progress projects. Connected to the desk is the Corner Keying Unit (J) for the monitor and keyboard. This unit also has plenty of surface space for your telephone, modem, and APS hard and removable media drives. Turning the corner, you'll find a larger 48" desk (A) that serves as the main work area. Added to this desk is a 12" deep shelf (B) for books, media, or software storage.

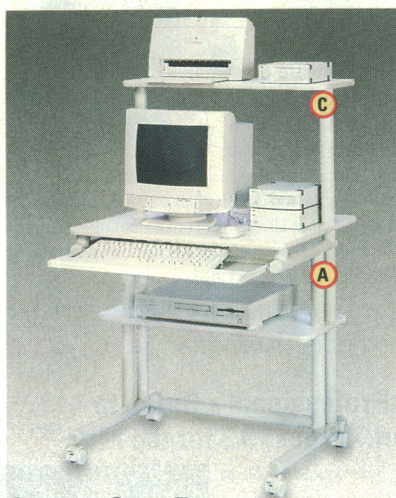
As a special bonus, we've value priced the entire group. All of these components, if purchased separately, would cost \$939.80. If you purchase them together, we'll lower the price to \$699.95. That's a \$149 savings!

All units ship UPS. Please allow 7 to 10 days for delivery.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS VALUE PRICE
106092	CORNER WORKSTATION GROUP	\$939.80	\$699.95

Organize Your Work Environment

Carts



Compu-Carts™

Free up some of your valuable workspace by organizing your office with a Compu-Cart. Compu-Carts are strong, attractive and useful companions for your computer that can hold and organize your CPU, monitor, keyboard and printer. Each piece is made from rigid steel tubing and features a sturdy laminated board work surface. Simple or complex, Compu-Carts are flexible enough to accommodate all of your hardware.

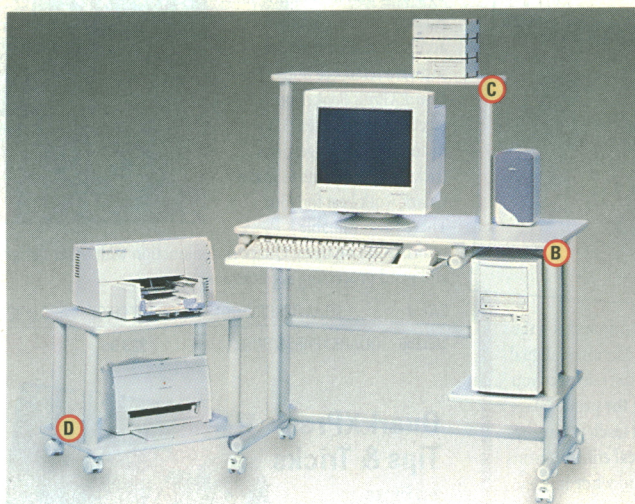
Compu-Cart 104 (A) is great for desktop style computers. It houses the CPU and keyboard below the work surface.

The Compu-Cart 106 (B) is designed to accommodate a tower style CPU. The unit also has a sliding keyboard drawer and a generous work surface.

Both the Compu-Cart 104 (A) and the CompuCart 106 (B) come standard with a monitor shelf that is situated 6" above the work surface and is designed to hold a 14-15" monitor. If you use a larger monitor, or prefer to have your monitor on the work surface, you can order 18" shelf risers that allow you to sit external drives, printers or other peripherals 18" above your workspace.

The 4-Wheel Printer Cart has a top shelf for your printer or fax and a lower shelf for supplies.

All Compu-Carts come with built-in wheels that allow you to easily reposition your office to meet your changing needs or to simply pull a Compu-Cart away from the wall so that you can connect and access cables.



KEY	CAT. #	ITEM DESCRIPTION	DIMENSIONS	PRICE
A	106571	COMPU-CART 104	30" H x 30" W x 25" D	\$299.95
B	106573	COMPU-CART 106	37" H x 41" W x 25" D	319.95
C	106691	18" SHELF RISER TUBES	18" H	18.95
D	106557	4-WHEEL PRINTER CART	18" H x 17" W x 16" D	109.95

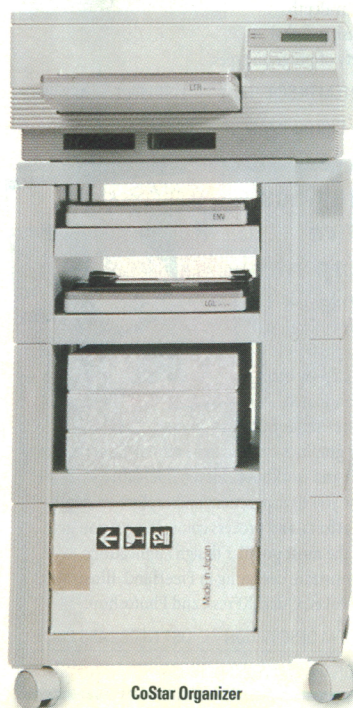


See Page
38
for Printers

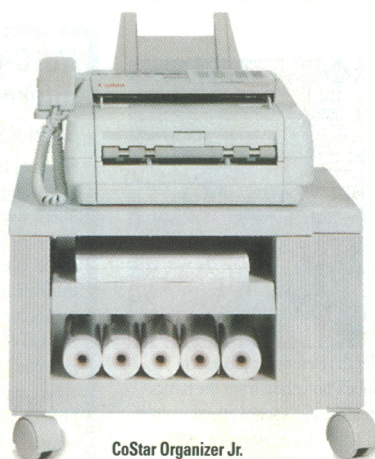


Jennifer On...Compu-Carts

A little office fun never hurt anyone, and when you can clean up and reorganize your office at the same time, well – that's an opportunity that shouldn't be missed. I guess that's why I like Compu-Carts so much. Compu-Carts provide solid, durable construction, yet their large casters allow me to easily move my workspace around to fit both my mood of the moment and my tasks du jour. Most of all though, they're fun. I can't tell you what a really good time I have positioning my Compu-Cart workspace so that it blocks the entrance to my human's office cube and playing "toll collector." It's great. He always pays the toll 'cause he's learned the hard way that these teeth aren't just decorative...



CoStar Organizer



CoStar Organizer Jr.

Organizer™ Carts

Finding a place to organize all the gear and accessories you need for your laser printer or fax machine can be quite a chore. Small tables never have enough storage and copier stands never seem to quite fit the large footprint of many laser printers. Now you can end that mess and clutter around your laser printer with the Organizer and Organizer Jr. from CoStar. Shelves provide plenty of room to store extra envelopes, paper and toner cartridges. Four carpet casters make the organizer easy to move as your needs change.

(Organizer: 17.5" W x 29" H x 18.75" D; 45 lbs.)

(Organizer Jr.: 17.5" W x 12" H x 18.75" D; 20 lbs.)

CAT. #	ITEM DESCRIPTION	PRICE
100430	ORGANIZER	\$149.95
100431	ORGANIZER JR.	79.95

(Glossary Continued from page 47)

the data. Read/write heads recalibrate periodically to compensate for this change. T-Cal can take up to several seconds, a condition which can be problematic of the uninterrupted demands of AV data capture. Special AV drives do not require T-Cal (because of embedded servo design) or postpone calibration until a data transfer is complete.

Transfer Rate: the amount of data which can be transferred from one point to another in a given period of time. Transfer rates for reading data from the drive may not be the same as the transfer rate for writing data to the drive. Transfer rates are CPU dependent. Regardless of what transfer rate your drive is capable of, the actual transfer rate will only be as fast as your computer can handle. Buying a drive capable of high transfer rates for a computer with a lower capability will limit the drive's performance, just as saddling a computer with a drive whose transfer rate is too slow will limit that of the computer.

Travan: a special version of the QIC-Wide tape format which uses a slightly larger cartridge to allow for more tape length. Travan tapes (currently) are 750 feet long and can store up to 4GB uncompressed, depending on the tape format.

Ultra SCSI: this new SCSI standard effectively doubles the maximum transfer rates provided under Fast SCSI-2 to up to 20MB/sec. on a 8-bit bus and up to 40MB/sec. on a 16-bit bus.

Unformatted Capacity: the capacity of a disk drive (in number of bytes of data that can be stored on the disk) before it is formatted for a particular kind of computer. Unformatted capacity is a physical property of the drive, relating to the number of platters and the density of data on the platters.

Update, -ing: APS PowerTools is able to replace the existing driver without affecting the data stored elsewhere on a hard disk. This process is called updating. Data should, nonetheless, be backed-up prior to updating.

Wide SCSI: a revision of the SCSI specification which allows for 16-bit data transfers and up to 15 peripherals per bus, plus one host. Wide SCSI enjoys significantly increased transfer rates over those of a traditional SCSI bus. It requires special drives and adapters. Fast SCSI and Wide SCSI are often implemented together, though not always.

800-374-568
24 Hours a Day, 7 Days a Week

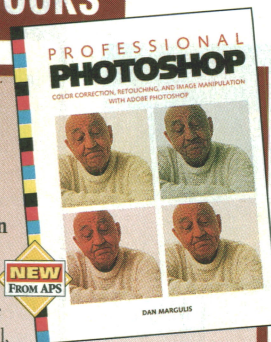
Design Books

Professional Photoshop

Color Correction, Retouching, and Image Manipulation with Adobe Photoshop™

By Dan Margulis. Since color is such a powerful, emotional stimulant, this book focuses primarily on the art of color correction and color manipulation of digital images with Adobe Photoshop. This is the reference you need to help make your images leap off the printed page. Aided by loads of images, the book will teach you many essential skills like color adjustment, local enhancements of pieces of the image, creating black and white images and duotones, simple merges of two or more images, correction of defects like dust and scratches, and more.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106711	PROFESSIONAL PHOTOSHOP	\$49.95	\$39.95



Photoshop f/x

By Cathy Abes. Learn to push Photoshop to its creative limits. Start with a full-color visual tour through an array of dazzling professional projects. Then learn techniques for using Photoshop and third-party filters, customizing filters, masking, 3D, and much more. Comes with an Online Companion and a CD-ROM loaded with useful files.

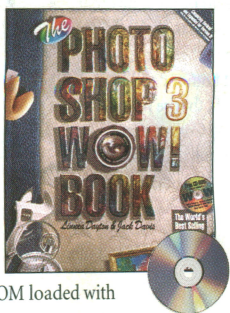
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
100036	PHOTOSHOP F/X*	\$39.95	\$31.95



The Photoshop 3 Wow! Book

By Linnea Dayton and Jack Davis. For the definitive Photoshop help book, look no further. This guide is packed full of useful information, step-by-step techniques, tutorials, and tips for helping you work more quickly and easily in Photoshop. Comes with a CD-ROM loaded with filters, displacement maps, and more.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
100037	PHOTOSHOP 3 WOW*	\$39.95	\$30.95

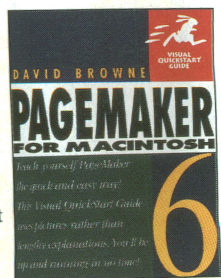


PageMaker 6 for Macintosh:

Visual QuickStart Guide

By David Browne. Jump into PageMaker 6 feet first, and learn to use all of the great new bells and whistles of the current version of this software quickly and easily.

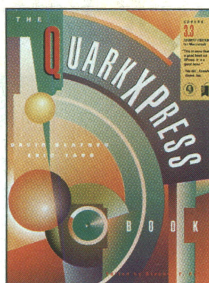
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
105348	PAGEMAKER 6 FOR MACINTOSH	\$16.95	\$13.95



The QuarkXPress Book, 4th Edition

By David Blatner and Eric Taub. An easy-to-use, complete, accurate, and informative software reference book, *The QuarkXPress Book* covers every facet of QuarkXPress 3.3, including tips, suggestions, tricks, and shortcuts to make Quark work best for you. There's also valuable information on using Quark in conjunction with other design and word processing applications.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
105256	QUARKXPRESS BOOK, 4TH ED.	\$29.95	\$22.95



QuarkXPress Tips & Tricks

2nd Edition

By David Blatner, et al. Over half of the tips covered in this book are completely new and have never been in print before, making this guide a must for every QuarkXPress 3.3 user. It includes tips for every level of Quark experience to help you get better, faster, and easier results. Includes a CD-ROM filled with freeware, shareware and a demo of Quark itself.

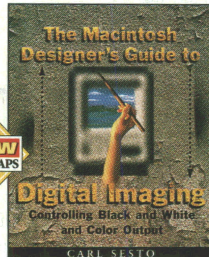
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
105255	QUARK TIPS & TRICKS, 2ND ED.*	\$34.95	\$27.95



The Macintosh Designer's Guide to Digital Imaging

By Carl Sesto. If you've been dabbling in desktop publishing, but want to know how to spice up your publications with black and white or color images, this book is for you. Written for a non-technical audience, this book gives you the fundamentals of converting graphic images into a digital form that you can modify, manipulate, and output.

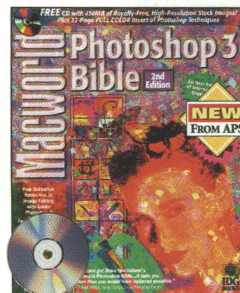
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106715	DESIGNER'S DIGITAL IMAGING	\$29.95	\$24.95



Macworld Photoshop 3 Bible, 2nd Edition

By Deke McClelland. Whether you're a Photoshop veteran wanting to use the power of this vast program to its fullest or a novice needing to gain a solid footing in Photoshop, this book is for you. This indepth reference explores the features and functions of Adobe Photoshop from the basics to advanced applications in retouching, special effects, color correcting, and composition. The book comes with a CD-ROM loaded with hundreds of high-resolution images, useful plug-ins, and interesting articles.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106721	MW PHOTOSHOP 3 BIBLE, 2ND ED.*	\$39.95	\$29.95



Director 5 Demystified

By Jason Roberts. Using real-world projects to make Director 5's features easy to understand, this guide will walk you through the creation of several interactive projects. You'll be able to try assembling each project yourself, thanks to the graphics, audio, and text files that are on the included CD-ROM. The guide also addresses many multimedia design principles and holds complete documentation on Director's powerful scripting language, Lingo.

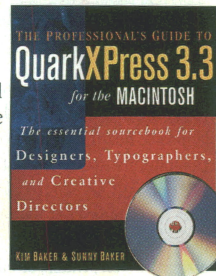
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106717	DIRECTOR 5 DEMYSTIFIED*	\$39.95	\$29.95



The Professional's Guide to QuarkXPress® 3.3 for the Mac

By Kim Baker and Sunny Baker. Use this guide to learn real-world design and production techniques that will take you all the way from the desktop to the print shop. More than an introductory book covering Quark's menu options, this professional reference shows you how to implement spectacular designs with QuarkXPress and how to get them to print exactly as planned. The book comes with a CD-ROM that's loaded with freeware and shareware QuarkXtensions as well as templates, fonts, and graphics.

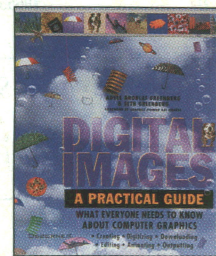
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106712	PRO'S GUIDE TO QUARKXPRESS*	\$39.95	\$29.95



Digital Images A Practical Guide

By Adele Drobias Greenberg and Seth Greenberg. Become a whiz with digital images—creating, digitizing, downloading, editing and printing them—with this guide. It starts with basic topics like scanning and resolution, then moves into in-depth explorations of using digital images in a variety of program types.

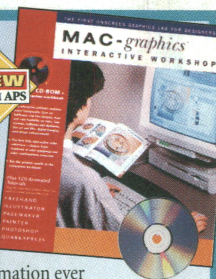
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
105355	DIGITAL IMAGES	\$26.95	\$21.95



MAC-graphics Interactive Workshop

By Octogran Publishing. The most complete collection of interactive graphics experiments, step-by-step instructions, animated tutorials, and reference information ever assembled for graphics artists can be at your fingertips in this CD-ROM and workbook. Eleven interactive modules allow you to experiment and explore in-depth type, graphic effects, and process color. To help you get familiar with the most popular design applications, tutorials demonstrate designing in FreeHand, Illustrator, Painter, PageMaker, QuarkXPress, and Photoshop.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106718	MAC-GRAPHICS WORKSHOP*	\$79.95	\$59.95



Macworld Creating Cool Web Pages with HTML

By Dave Taylor. Take this fun, painless introduction to HTML (HyperText Markup Language), and you'll be able to create exciting, interesting Web pages. This informative text provides not only the basic nuts and bolts of HTML, but it also gives an exceptional guide to actually using the code to make Web documents on the Internet. Comes with a copy of MacWeb from EInet.

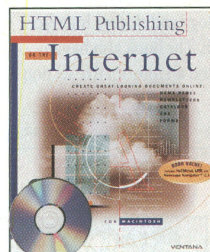
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106404	COOL WEB PAGES WITH HTML	\$19.95	\$14.95



HTML Publishing on the Internet

By Brent Heslop and David Holzgang. If you're interested in publishing great looking pages on the World Wide Web using HTML, this guide is for you. The book includes an Online Companion and a free CD-ROM that's loaded with \$300 worth of tools and resources including HoTMetal LITE and Netscape Navigator 3.0.

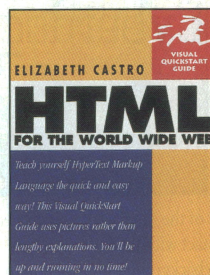
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
105357	HTML PUB. ON THE INTERNET*	\$49.95	\$39.95



HTML for the World Wide Web: Visual QuickStart Guide

By Elizabeth Castro. Even if you have no prior knowledge of HTML, or the Internet, this book will give you the knowledge you need to design dazzling pages on the World Wide Web. With this book, you'll be able to complete every facet of your Web page by following the clear instructions and illustrated examples.

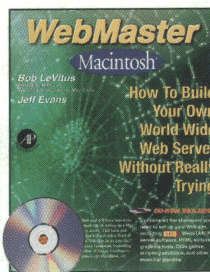
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
105349	HTML FOR THE WWW	\$17.95	\$14.95



WebMaster Macintosh

By Bob LeVitus and Jeff Evans. Turn your Mac into a World Wide Web site on the Internet with a minimum of effort, and with absolutely no UNIX! This guide by Bob LeVitus and Jeff Evans and the included CD are all you need. Use the new WebStar PS (formerly MacHTTP) and other software included on the CD to create your site.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
101917	WEBMASTER*	\$29.95	\$22.95



Internet Starter Kit, 4th Edition

By Adam Engst. Start cruising the 'Net in no time using the clear, step-by-step instructions in this book by the author of *TidBITS*. The book comes with a CD-ROM loaded with the tools you'll need to get connected and productive.

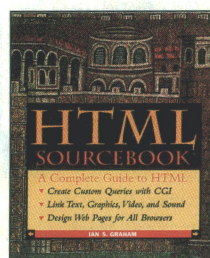
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106488	INTERNET STARTER KIT*	\$39.95	\$29.95



HTML Sourcebook, 4th Edition A Complete Guide to HTML 3.0

By Ian S. Graham. Every Web page developer will benefit from this HTML reference which provides a complete description of HTML commands, techniques, and tools. The guide also gives you step-by-step examples of Web page construction showing you how to incorporate graphics, sound, and video into professional-quality Web page documents. You'll find complete coverage of HTML 3.0 and the CGI Standard, as well as tips on Web document design and the use of experimental HTML features such as Netscape extensions.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106710	HTML SOURCEBOOK, 2ND ED.	\$29.95	\$24.95



Easy Site™ Handbook Create Your Own Web Site Without Using a Computer!



By IMV Internet. You know the Internet, and the World Wide Web in particular, is a powerful way to reach potential customers. The Web is an inexpensive medium which allows you to distribute information about your company, provide timely product information, gather information, and even accept and confirm orders. Until now, though, creating a professional looking Web site required extensive Web authoring knowledge and, at the very least, a computer. Now there's an alternative: Easy Site.

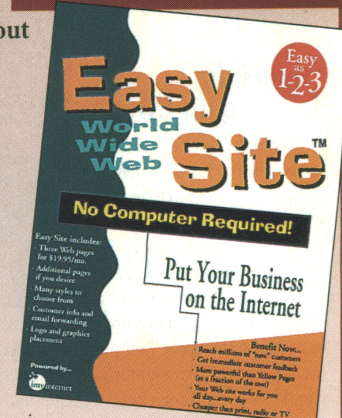
Easy Site requires no computer or programming knowledge to create your Web site and reach a potential customer base of more than 20 million people. Simply follow Easy Site's step-by-step instructions to fill out the pre-printed Web page worksheets and mail them to IMV Internet in the included envelope. Within 48 hours of receipt, IMV will have your Web site ready for approval. Once approved, your Web site will be made available to the world, you pay just a minimal hosting fee directly to IMV Internet to house the Web site. The Easy Site basic Web site package gives you three Web pages with links between all of the pages plus one link to an external Web site of your choice, graphics on every page, and E-mail forwarding of site visitor responses for only \$19.95 per month. If you have a computer with online access, Easy Site allows you to update your text and graphics online as often as you wish by using a special password to your site.

If you've been thinking about tapping into the awesome potential of the World Wide Web, the time to act is now. Easy Site is the "no tech" way to develop a professional Web site for your company and begin reaping the benefits of this booming medium.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE†
106709	EASY SITE HANDBOOK	\$39.95	\$29.95†

†Price does not include monthly Web site hosting fees which are paid directly to IMV Internet.

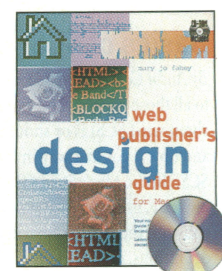
Internet Books



Web Publisher's Design Guide for Macintosh

By Mary Jo Fahey. See the process of designing and creating Web pages from an artist's perspective in this Web publishing guide. If you work with Quark or Photoshop now, the context and techniques you'll learn will be familiar to you. Learn to enhance your pages with texture, color backgrounds, sounds, movies and animation. Use the resources on the included CD-ROM to help you create your pages.

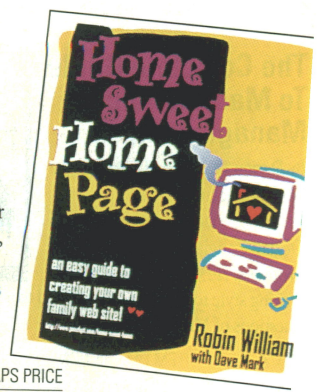
CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
105253	WEB PUBLISHER'S DESIGN GUIDE FOR MAC*	\$34.95	\$29.95



Home Sweet Home Page

By Robin Williams and Dave Mark. Staying in touch with friends and family is a cinch when you have a personal Web site. This fun, non-technical book by Robin Williams and Dave Mark helps you make your own Web site so you can have a professional-looking, interactive Web site with a personal flair. The guide includes clear instructions and plenty of illustrations to show you how to create Web pages you'll be proud to have your friends and family visit.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106719	HOME SWEET HOME PAGE	\$14.95	\$11.95



* Books with CDs or software may not be returned after the package has been opened. Defective CDs or software will be exchanged.

800-374-568
24 Hours a Day, 7 Days a W

Mac & Networking Books

PageMill: Training on CD

By Quay2 Multimedia. The easiest and best way to learn any new software package is to have an experienced, patient trainer show you the ropes. That's exactly how you'll learn PageMill using *PageMill: Training on CD*. The CD provides over five hours of narrated on-screen instruction, broken up into 67 separate topics. Your personal trainer presents the material in a clear, straightforward manner, giving you a solid knowledge of the Adobe PageMill point-and-click Web page design environment. In addition to the training, the CD also contains a free demo version of Adobe PageMill, an online dictionary of Web jargon, and hundreds of graphics you can use in your Web page designs.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106424	PAGEMILL: TRAINING ON CD*	\$49.95	\$39.95

Macintosh Crash Course

By Glenn Brown. Learn how to diagnose problems, prevent crashes, and what to do when they do occur with this helpful guide. It is filled with reviews of software designed to help you avoid crashes and other problems. Includes a CD-ROM loaded with shareware and demos of many of the programs covered in the book. Also included are many interviews and insights from noted experts in the Mac community.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
105059	MAC CRASH COURSE*	\$24.95	\$24.95

Basics of SCSI

By Ancot Corporation. Get answers to all those nagging questions about what SCSI is or should be, and how it got that way in *Basics of SCSI*. In the Mac's SCSI filled universe, this reference provides you with the technical background, definitions, explanations, specifications, commands, and protocols for SCSI.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
100002	BASICS OF SCSI	\$9.50	\$7.95

The Complete Guide To Mac Backup Management, 1st Edition

By Dorian J. Cougias. The definitive book on Macintosh backup is written by Mac networking expert Dorian Cougias of Network Frontiers. He uses his engaging writing style to help you identify and work through difficult questions of Macintosh backup.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
100034	GUIDE TO MAC BACKUP, 1ST ED.*	\$9.95	\$4.95

*Books with CDs or software may not be returned after the package has been opened. Defective CDs or software will be exchanged.

FWB's Guide to Storage

By Norman Fong. If you've ever wondered how that SCSI peripheral device sitting on your desktop actually works and how it communicates with your computer, this is the book you need. Answering those questions and more, this guide by the president of FWB, Inc., covers all types of peripheral devices, RAID technology and storage interfaces such as SCSI, serial SCSI, and IDE. The book also has an excellent troubleshooting guide and an informative section on expansion buses.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106722	FWB'S GUIDE TO STORAGE	\$29.95	\$24.95

Cyberdog™ The Complete Guide to Apple's Internet Productivity Technology

By Jesse Feiler. Learn to use the task-centered architecture of Apple's Cyberdog software to get the most from the Internet. The Cyberdog software simplifies the power and mystery of the Internet, making it more useful, and giving your contact with the Internet a very common, comfortable feel. From background information to making real-life solutions using Cyberdog, this guide arms you with the knowledge you'll need.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106485	CYBERDOG	\$29.95	\$24.95

Macworld, New Complete Mac Handbook, 4th Ed.

By Jim Heid. This latest edition of *Macworld's Mac reference* takes readers from merely using Macs to mastering and expanding Mac systems and beyond. In its 1,100+ pages the reference covers almost every facet about Macintosh use and terminology. Includes an Interactive Companion CD-ROM.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106403	MW COMPLETE HANDBOOK*	\$29.95	\$29.95

The Macintosh Bible, 6th Edition

By Darcy Di Nucci, Liz Castro, et al. Covering the full range of Macintosh hardware and software issues, this guide is an indispensable reference for Mac users of all levels. In its 1,000 pages, this new edition covers using the Internet, the Mac's place in a Small Office / Home Office environment, hardware and software reviews, and an excellent troubleshooting section. In all, 13 editors and more than 50 Mac gurus contributed to this reference.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106700	THE MAC BIBLE, 6TH ED.	\$29.95	\$24.95

Designing AppleTalk Network Architectures

By Dorian J. Cougias, et al. Be certain to use this reference as you design the physical and logical structure and architecture of your network. The book thoroughly explains proper use of hardware and cabling to implement single- or multiple-building networks. Includes a Mac CD-ROM loaded with network tools.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106427	APPLETALK ARCHITECTURES*	\$29.95	\$24.95

AppleTalk Network Services

By Dorian J. Cougias, et al. Written as a companion book to *Designing AppleTalk Network Architectures*, this guide helps you decide what services and software you want to run on your network. The book will help you choose an E-mail service and decide which database will be most beneficial to your users. A CD-ROM containing useful network tools is included with the book.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106716	APPLETALK NETWORK SERV.*	\$24.95	\$27.95

Managing AppleShare

By Dorian J. Cougias and Tom Dell. *Managing AppleShare* is about how to decide which types of servers you need, how to set them up, how to manage and troubleshoot them.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
105032	MANAGING APPLESARE	\$29.95	\$22.95

Intranet Business Strategies

By Mellanie Hills. After reading about Intranet applications in business publications everywhere, you know that you want to develop one, but what is the best plan for implementing an Intranet for your company. This guide will show you how an Intranet will fit into your organization and who will benefit from it. You'll also learn what an Intranet should look like as well as its advantages and disadvantages. The book includes Intranet case studies and actual interfaces of several companies.

CAT. #	ITEM DESCRIPTION	LIST PRICE	APS PRICE
106713	INTRANET BUS. STRATEGIES	\$29.95	\$24.95

World Wide Web Weaver for Macintosh and Power Mac 2.0

Quickly and easily add HTML tags to your Web page documents using *World Wide Web Weaver*. This software supports the latest HTML developments including support for Netscape Frames and HTML 3.0 tags. It also allows you to easily create HTML tables and links, and it converts Macintosh styled text to properly formatted HTML code. The software's powerful text editor supports color and styled text as well as special characters so you can design effective Web pages quickly and easily.

World Wide Web Weaver



106703 WORLD WIDE WEB WEAVER* \$79.95

Kai's Power GOO™

◆◆◆◆ MacWeek



Unleash your hidden creativity, and have a great time experimenting with Kai's Power GOO. Use it to squish and smear Aunt Harriet's mug shot into a hilarious new form, or put your dog Scruffy's ears on your own face. You can even make movies, screen savers, T-shirts, Web pages, and more with GOOed images. The options are limitless, so let your imagination run wild. You'll also benefit from GOO's fast graphics engine which lets you see your changes almost instantly, so there's no long wait to see what Aunt Harriet would look like if you smooshed the top of her head into a spiky, punk rock hair hairdo.

106468 KAI'S POWER GOO* \$49.95



Software

Anubis™ and CD AutoCache™ Software

Anubis is one of the fastest, most reliable SCSI software available for the Mac. *Anubis* anticipates possible problems and corrects them on the fly, protecting you from disastrous disk crashes and other unanticipated errors that could bring your work to a screeching halt. *Anubis* is compatible with virtually all SCSI disk mechanisms, including fixed disks, SyQuests, Opticals (3.5" and 5.25") and flopticals.

CD AutoCache offers you a simple and quick solution to push your CD-ROM drive to its maximum potential, increasing the performance of even the fastest drives on the market. *CD AutoCache* supports all CD-ROM drives and formats including Kodak's Photo CD. *CD AutoCache* monitors how your computer requests and uses data from CD-ROM disks and, through a proprietary artificial intelligence algorithm that automatically adjusts total cache and page sizes on the fly.

SCSI Manager 4.3 compliant *Anubis RAID* offers you the fastest software RAID (0 & 1) solution for the Mac. *PowerControl* is a performance-enhancing utility that allows you to view and optimize internal drive settings and mode page parameter options which directly affect the way a drive handles data.



CAT. #	ITEM DESCRIPTION	PRICE
105149	CHARISMATIC ANUBIS UTILITY W/ TURBO MO*	\$89.95
105150	CHARISMATIC CD AUTOCACHE*	\$59.95
105166	CHARISMATIC RAID W/POWERCONTROL*	\$129.95

Discribe™

Using *Discribe* software for the Macintosh, you'll be able to quickly and easily master CDs. *Discribe's* powerful, intuitive interface leads you through all of the steps necessary to properly master a CD, helping ensure a successful burn. Its advanced capabilities also make it easy to select the files you want on your CD. Use *Discribe* and your 1X, 2X, 4X, or 6X CD-Recorder to create professional quality multimedia presentations, distribute large amounts of data, or make reliable data archives. *Discribe* supports all popular CD-ROM formats and standards, including audio CDs. CDs mastered using *Discribe* can be viewed on virtually any SCSI CD-ROM drive. System requirements: Quadra or greater CPU, System 7.0 or later with 8MB of RAM.



106437 DISCRIBE* \$349.95

The Mac Best Seller Software List

CAT. # NUMBER	ITEM DESCRIPTION	PRICE	CAT. # NUMBER	ITEM DESCRIPTION	PRICE	CAT. # NUMBER	ITEM DESCRIPTION	PRICE
COMMUNICATION AND UTILITY SOFTWARE			DESIGN SOFTWARE			DESIGN SOFTWARE		
105378	CLARIS EM@ILER 1.0	\$49.95	106705	ADOBE SITEMILL 1.0	\$199.95	106674	QUARKXPRESS 3.32	\$659.95
106436	CONFLICT CATCHER 3	65.95	106704	ADOBE PAGEMILL 2.0	99.95	106675	RAY DREAM STUDIO 4.1	299.95
105117	NORTON UTILITIES 3.2 MAC	94.95	105382	FRACTAL DESIGN PAINTER 4 UPGRADE	129.95	106676	RAY DREAM DESIGNER 4.1	99.95
106660	AFTERDARK 4.0 SCREEN SAVER	29.95	106469	STYLIST 1.0	124.95	106677	DIRECTOR MULTIMEDIA STUDIO 2.0	994.95
105379	OMNI PAGE PRO 6.0 UPGRADE	149.95	105385	POSER 2.0	94.95	106678	FREEHAND 7 W/SHOCKWAVE	399.95
103341	SOFTWINDOWS 95 FOR POWER MAC	349.95	106110	THE BLACK BOX 2.0	99.95	106679	DIRECTOR 5.0	819.95
106430	SOFTWINDOWS 3.0 FOR POWER MAC	319.95	106706	QX TOOLS 2.0	99.95			
106142	SOFTWINDOWS 1.0 FOR PERFORMA	179.95	106707	3D WEB WORKSHOP 1.0 WITH PAGEMILL	229.95			
106145	SOFTWINDOWS 1.0 FOR MACINTOSH	299.95	106708	3D WEB WORKSHOP 1.0	149.95			
106144	SOFTPC PROFESSIONAL 3.1	219.95	106661	ADOBE PHOTOSHOP 4.0	599.95			
BACK-UP SOFTWARE			106662	ILLUSTRATOR 6.0 W/PAGEMILL 1.0	379.95			
105127	REMOTE 10-PACK	139.95	106663	ADOBE PAGEMAKER 6.5	599.95			
105128	REMOTE 50-PACK	599.95	106664	PERSUASION 4.0	289.95			
106701	REMOTE 5-PACK FOR WIN95/NT	99.95	106665	ADOBE ADOBE 3.0	199.95			
106702	REMOTE 10-PACK FOR WIN95/NT	149.95	106671	EXTENSIS PHOTOTOOLS 1.0	99.95			
105126	RETROSPECT 3.0	139.95	106672	FRACTAL DESIGN EXPRESSION	299.95			
			106673	FRACTAL DESIGN DETAILER	299.95			

CD-ROM

3.5" Diskette

57
800-374-5681
24 Hours a Day, 7 Days a Week

Protection From Data Line Surges

ProtectNet

Protect your network connections, serial ports, and telephone equipment against data line power surges with compact, economical ProtectNet Surge Protectors. They protect equipment from peak voltage of +/- 6000V. Using a ProtectNet device in conjunction with other APC AC power protection products can double the amount of the Lifetime Equipment Protection policy of the AC power product. If all paths to the equipment are protected by APC products, the equipment is protected up to a \$50,000 repair or replace policy.

CAT. #	ITEM DESCRIPTION	PROTECTED EQUIPMENT	PRICE
106322	PROTECTNET P10BT	ETHERNET 10BASE-T NETWORK INTERFACE CARDS, HUBS OR LAN EQUIP. (RJ45)	\$26.95
106323	PROTECTNET P10B2	THINNET 10BASE-2 NETWORK INTERFACE CARDS, HUBS, OR LAN EQUIP. (BNC)	59.95
106324	PROTECTNET PTEL2	PHONE EQUIP., FAX MACHINES, MODEMS, AND ANSWERING MACHINES (RJ45)	24.95

APC
AMERICAN POWER CONVERSION



Jennifer On...ProtectNet

The other day I got zapped while trying to thump everyone in the network version of the newest adrenaline-pumping shoot'em up game while my supervisor's back was turned. "Bettered," you ask? Not by my opponents (I'm way too good for that), and not by the boss' boss (though I mostly let him win), but by some stray voltage with a nasty feline attitude. Oh no, there was no lapse on my part, my game strategy was flawless. This fatal blow to my network card came in from outside the building, and proved that my power protection plan had a couple of holes big enough to stuff a cat through. A little investigation proved that I had committed the #1 power protection sin of not protecting my data lines (though its only a slightly worse sin than wetting on those electric floor outlets that my workstation plugs into). I found a solution though. Now I use ProtectNet surge protectors on both my network and modem lines, and I'm once again humbling my networking foes in our after-hours gaming sessions.

Silverskin RJ Cable and Connectors

	RJ11	RJ45	
QUANTITY	4 CONDUCTOR	8 CONDUCTOR	PRICE
50 CONNECTORS	100518	100520	\$9.95
CRIMP TOOL	100517		39.95
1000' SPOOL*	100519		79.95
1000' SPOOL*		100521	119.95

*Cable is not category 5



Category 5 Assembled Patch Cords

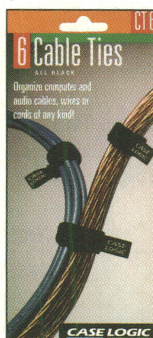
These cables are for use on a 10Base-T, 100Base-T, or Token Ring network. Rated for speeds exceeding 100Mbps, these modular RJ45 patch cables are protected from loose contacts by the molded connector design. These quality cables are constructed of 24AWG stranded copper conductors.

CAT. #	LENGTH	PRICE
106075	3'	\$5.95
106076	10'	8.95
106077	25'	12.95
106078	50'	18.95

Category 5 Cabling

This EIA/TIA-568 Category 5 cabling features 4-pair, 24AWG solid bare copper conductor construction. It is built for high-performance, high-speed data applications such as 10Base-T, 100Base-T, and Token Ring networks. The cabling provides low attenuation and near-end crosstalk (NEXT), making it compatible with 100Mbps applications. Available with a gray PVC or a blue Plenum jacket for color coding between different applications.

CAT. #	ITEM DESCRIPTION	PRICE
LEVEL 5	CABLING WITH GRAY PVC JACKET	
106345	500' SPOOL	\$74.95
106346	1,000' SPOOL	139.95
LEVEL 5	CABLING WITH BLUE PLENUM JACKET	
106347	500' SPOOL	164.95
106348	1,000' SPOOL	329.95



Cable Ties

Here's the answer to unruly cables! Use these six cable ties to arrange and organize computer, phone, stereo, and television cables. These 6.75" cables are made of durable self-attaching nylon and are available in packages of all black or assorted colors.

CAT. #	ITEM DESCRIPTION	PRICE
106358	COLORLED CABLE TIES	\$2.95
106357	BLACK CABLE TIES	2.95

EasyNet Transceivers

Connect your Ethernet-equipped Mac or printer to your Ethernet network with a small, inexpensive EasyNet Transceiver. The transceiver connects to your Mac's Apple Ethernet port and gives you either a BNC or RJ45 connector to attach to the network cabling. The EasyNet Transceiver has a BNC connector that attaches to your thinnet network, and EasyNet-T has an RJ45 connector to attach to a 10Base-T Ethernet network.



CAT. #	ITEM DESCRIPTION	PRICE
105363	EASYNET	\$39.95
105364	EASYNET-T	39.95



Weidmuller Paladin

Category 5 Installation Kit

Use this handy kit to cut, crimp, and test Category 5 cabling. It includes a crimper frame, an RJ45 die set, a KT 8 cutter, 50 Category 5 standard plugs, and the Patch-Check tester which checks RJ11 and RJ45 computer and telephone cables for open, shorted, and cross-connected wires.

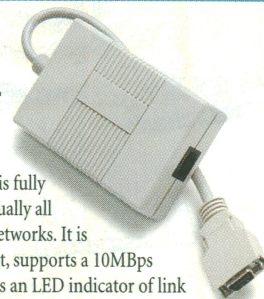
106395

CATEGORY 5 INSTALLATION KIT*

\$159.95

AAUI Transceiver

Our inexpensive Apple compatible Ethernet transceiver is fully compatible with virtually all 10Base-T Ethernet networks. It is IEEE 802.3 compliant, supports a 10Mbps transfer rate, provides an LED indicator of link integrity and has a full EMI/RFI FCC Class B certification. Connect your Quadra, Centris, Power Mac, Duo Dock or 500 series PowerBook easily and without spending an arm and a leg.



100515	AAUI TRANSCEIVER	\$49.95
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LocalTalk Connector

This is an affordable, flexible way to build LocalTalk networks with ordinary telephone-style wire and standard jacks. The LocalTalk Connector is a dual jack connector, available to fit the DIN-8 (serial) port of LocalTalk devices, and comes with an optional terminating resistor. Its convenient size makes it easy to take along in a pocket or accessory bag.



100473	CONNECTOR	\$10.95
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Farallon Makes Networking Easy

Network Communications

Ether10-T™ Starlet® Hubs

- Simple, low-cost way to create and expand 10Base-T networks
- Link multiple hubs with thinnet (BNC) for easy network expansion
- Installation takes only minutes

In minutes, you can create a flexible, reliable 10Base-T network with the Ether10-T Starlet from Farallon. It's an ideal networking solution for small networks in offices, schools, workgroups and small businesses.

Start by choosing the hub size you need. Unmanaged Ether10-T Starlet hubs are available with 4, 8, or 16 RJ45 connection ports. You can then connect standard 10Base-T devices, such as Macs, printers and PCs to the hub using regular twisted-pair wire. Adding to the network is easy. Each Ether10-T Starlet has an additional thinnet (BNC) port that lets you link several hubs together to expand your network. The 8- and 16-port hubs also have an AUI uplink port so you can connect them to thick Ethernet or fiber backbones. Another easy way to expand your network capacity is by using the daisy-chainable technology of EtherWave products. Using EtherWave, you'll be able to connect a daisy chain of multiple 10Base-T devices to a single RJ45 port. Managing your 10Base-T network is easy, too. Each Ether10-T Starlet hub has clearly visible diagnostic LEDs so you can monitor power, activity, collisions and more. The compact design of the 4- and 8-port models will easily fit on a desk, or they may be mounted on a wall. The 16-port model mounts in a standard 19" rack. Lifetime warranty.



CAT. #	ITEM DESCRIPTION	PRICE
106137	4-PORT ETHER10-T STARLET HUB (PN515/4)*	\$119.95
106138	8-PORT ETHER10-T STARLET HUB (PN515/8)*	149.95
106139	16-PORT ETHER10-T STARLET HUB (PN515/16)*	419.95

Package Also Includes:

4- and 8-port

- Crossover cable (4-port only)
- BNC T-connector
- Wall mounting bracket
- User's guide
- Power supply

16-port

- BNC T-connector
- Rack mounting bracket
- User's guide
- Power supply

Count on APS and Farallon to bring you quick, easy Ethernet connections for your Macs, PowerBooks and printers

EtherWave & EtherMac Transceivers

Quickly and easily connect Ethernet-equipped PowerBooks, Macs, printers, and PCs to a 10Base-T Ethernet network using a compact EtherWave or EtherMac Transceiver. The EtherWave Transceivers allow you to create small networks without a hub by daisy-chaining up to eight devices while the AAUI EtherMac Transceiver is used to connect a single unit with on-board Ethernet to a network. The AAUI EtherWave Transceiver is for Macs with on-board Ethernet and Ethernet-equipped printers while the AUI EtherWave Transceiver is for PCs and printers with on-board Ethernet.

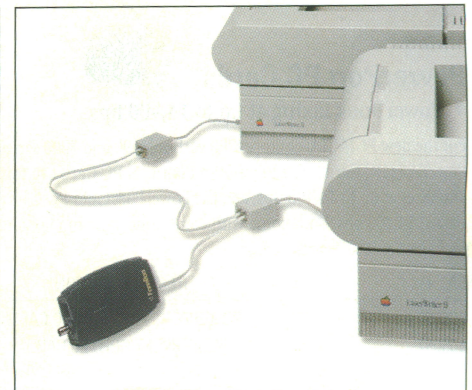
CAT. #	ITEM DESCRIPTION	PRICE
106134	AUI ETHERWAVE TRANSCEIVER*	\$99.95
106135	AAUI ETHERWAVE TRANSCEIVER*	99.95
105274	AAUI ETHERMAC TRANSCEIVER*	39.95



EtherWave® PowerBook Adapter EtherMac™ PowerBook Adapter

Using the serial port and an ADB power cord, these adapters connect any PowerBook or Macintosh without an available slot to 10Base-T or Thin Ethernet. A high-speed serial driver boosts the computer's network performance to speeds five times greater than LocalTalk. These portable, economical solutions are perfect for the PowerBook user who's on the go and needs to network in the office or on the road. They're the perfect solutions for building "portable networks" in minutes, without a hub. The EtherWave PowerBook Adapter has dual 10Base-T connections, and the EtherMac PowerBook Adapter has both 10Base-T and thinnet connections.

CAT. #	ITEM DESCRIPTION	PRICE
100360	ETHERWAVE PB ADAPTER (PN840ADB)*	\$269.95
106136	ETHERMAC PB ADAPTER (PN550C-ADB)*	279.95



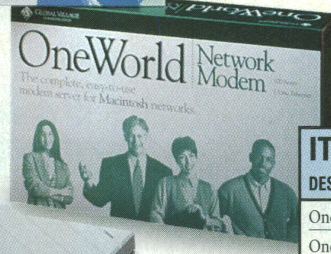
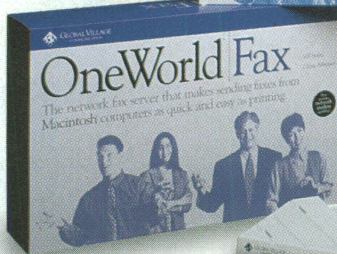
EtherWave® MultiPrinter Adapter

Connect your LocalTalk printers to a 10Base-T Ethernet network quickly and inexpensively with the EtherWave MultiPrinter Adapter. You can daisy-chain up to eight LocalTalk printers – and even PowerBooks and Macs, too – off of a single adapter. Just connect the end of the chain to the adapter's integrated RJ11 PhoneNET port for easy, reliable Ethernet networking. You won't need to install software or set any switches, so installation takes mere minutes. Each adapter includes one PhoneNET connector.

106133	MULTIPRINTER ADAPTER (PN848-1)*	\$345.9
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*APS 30-day money-back guarantee not applicable. Product covered by manufacturer's warranty.

800-374-568
24 Hours a Day, 7 Days a Week



Add fax, remote access, and modem capabilities to your Mac network

OneWorld Telecommunication Servers

- Doesn't require a dedicated Mac or server
- For PowerBook 190 or 5300 series

Just plug a power cord, telephone line(s) and your 10Base-T or LocalTalk network cable into the server, and install the client software on the individual Macs to activate the system.

The OneWorld Network Modem server has network modem capabilities and comes with one PowerPort Platinum modem. It has a bay for one additional Global Village modem.

105229 ONEWORLD NETWORK MODEM* \$1,019.95

PowerPort Platinum Pro PC Card

- Simultaneous fax and Ethernet connections
- For PowerBook 190 or 5300 series

The PowerPort Platinum Pro PC Card lets you send faxes at up to 14,400 bps and transmit data at up to 28,800 bps. This PC Card also has jacks to let you use your modem while simultaneously being connected to your Ethernet network. It comes with fax, OCR, and PC Card Enhancement software.

105065 POWERPORT PLATINUM PRO PC CARD* \$499.95



PowerPort PC Cards

- PowerBook faxing at up to 14,400 bps

For the new PCMCIA-equipped PowerBook 190 and 5000 series, we have thin, portable PowerPort PC Cards. The PowerPort Platinum PC Card can transmit data at up to 28,800 bps and faxes at up to 14,400 bps, and the PowerPort Gold PC Card sends and receives both fax and data at 14,400 bps. Both come with communication and fax software. PowerPort Platinum includes OCR software.

CAT. #	ITEM DESCRIPTION	PRICE
105056	POWERPORT PLATINUM PC CARD*	\$359.95
105057	POWERPORT GOLD PC CARD*	179.95



Konexx Koupler

Use your notebook computer's fax modem to connect to the Internet, send E-mail or send faxes from virtually any telephone in the world when you use the Konexx Koupler. The Koupler uses tight fitting rubber cups and a Velcro strap to attach to any telephone receiver and provide noise free communications at up to 24,000 bps. The Koupler operates on an included 9 volt battery, which draws power only when the Koupler is in use, assuring long life. The Konexx Koupler is compatible with any analog modem or fax modem.



106365 KONEXX KOUPLER* \$129.95

ITEM	PRODUCT FEATURES		
DESCRIPTION	NETWORK MODEM	FAX	REMOTE ACCESS
OneWorld Network Modem	•		
OneWorld Fax		•	
OneWorld Combo	•	•	•

OneWorld Fax has network fax and network modem capabilities and also comes with one PowerPort Platinum modem with room for one additional modem.

105228 ONEWORLD FAX* \$1,259.95

OneWorld Combo is your total telecommunications solution. It provides network remote access, fax and modem capabilities to your Macintosh network. Two PowerPort Platinum modems are included. Supports up to 30 users.

105226 ONEWORLD COMBO* \$1,789.95

TelePort Platinum Internet

- Includes NETCOMplete Internet kit with Netscape Navigator
- Highest Standard data rate available – 33.6

Developed specifically for performance-hungry Internet users, the TelePort Platinum Internet comes with everything you need to get started on the Internet, including NETCOM's NETCOMplete Internet software. It features advanced capabilities not found in any other modem this affordable, including an on-screen status and performance display and call sensing. TelePort Platinum Internet plugs into your Mac's serial port and includes the acclaimed GlobalFax software.

106670 TELEPORT PLATINUM INTERNET* \$189.95



CommuniCard Ethernet Adapter

Provide your PowerBook 5300 or 190 series with a quick and easy Ethernet networking solution. These PCMCIA Class II cards simply slide into your computer's PC Card slot to give you 10Base-T or thin Ethernet connections. Includes a five-year warranty.

CAT. #	ITEM DESCRIPTION	PRICE
105232	10BASE-T ETHERNET ADAPTER*	\$169.95
105233	THIN ETHERNET & 10BASE-T ETHERNET ADAPTER *	199.95



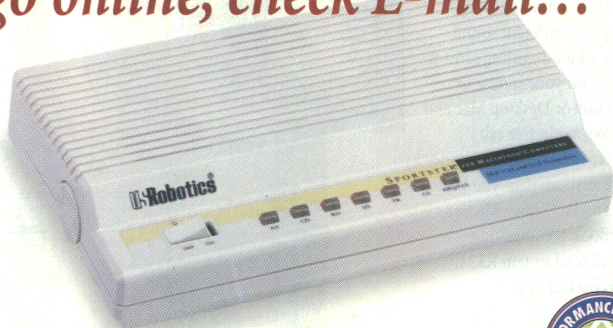
Konexx Mobile Konnector

Using the new Konexx Mobile Konnector, you'll be able to connect your computer's fax modem to almost any phone system, including challenging digital, PBX, and multi-line systems. The Mobile Konnector unit plugs into the back of the telephone where the handset cord attaches and provides one RJ11 port for your modem, and another for the telephone handset. When the modem is inactive, the telephone may be used. The Mobile Konnector runs on two 9 volt batteries with an average life of 40 modem off-hook hours, supports V.34 standards to allow transmissions up to 28,800, and is backed by a two-year warranty.



106366 KONEXX MOBILE KONNECTOR* \$129.95

A high-speed modem from APS makes it easy to send faxes, go online, check E-mail...



USRobotics® Sportster 28.8 Faxmodem

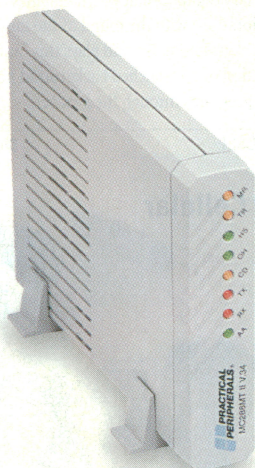
- With Internet connection kit
- Up to 33,600 bps – V.34 compatible

Do you want to surf the net, but are a little scared to try? The Sportster 28.8 Faxmodem comes with everything you need to make sure your first Net experience is a good one! Start out by reading the included guidebook, "Discover the World Wide Web With Your Sportster," and then go online with the included USRobotics Connections CD-ROM. It'll take you there at up to 28,800 bps and 33,600 bps for data to really let you fly through the Internet. The included fax software gives you many options and lets you send and receive faxes with the Sportster 28.8 Faxmodem at up to 14,400 bps. With the Connections software, you can find online addresses with New Riders' WWW Yellow Pages™ or send alphanumeric paging messages with Ex Machina**. With its combination of fax and data capabilities, the Sportster 28.8 Faxmodem is a powerful communications device for your home or office. Includes cords, cables and a five-year manufacturer's warranty.



105292 USROBOTICS SPORTSTER 28.8 FAXMODEM* \$179.95

**The person that you are paging must have an alphanumeric pager and alphanumeric paging service.



MacClass™ MiniTower II

- Position vertically or horizontally
- Powerful 14,400/33,600 bps modem

Sure, most modems these days will perform at 14,400 bps fax and 28,800 bps data, and so does the MacClass MiniTower II from Practical Peripherals. What sets this modem apart from the crowd is its intelligent design. It can be positioned on your desk horizontally or vertically in a minitower orientation. The MacClass MiniTower II comes complete with MacCom Center™ communications software, a phone cord and a Mac-to-modem serial cable. It is backed by a manufacturer's lifetime limited warranty.

CAT. #	ITEM DESCRIPTION	PRICE
106128	MC 144MT II*	\$89.95
106682	MC 33.6MT II	149.95

Telecommunications



Sportster® Voice for Macintosh

- Modem and voice mail in one unit
- Modem connections up to 33,600 bps

It may not clean windows or take out the trash, but the Sportster Voice for Macintosh really takes care of you when it comes to telecommunications. Not only does it provide reliable, high-speed fax and data transmissions, but it also manages your voice mail from incoming calls. That's right, it handles calls for you. You can even access your messages from any remote location using a touchtone phone. If you add a powered external speaker to the unit, it functions as a full duplex speakerphone, letting you talk and listen at the same time. It even supports Caller ID, available separately from your phone company. Using the Sportster Voice and the included fax software, you'll be able to send and receive faxes at up to 14,400 bps. Using the included USRobotics Connections CD-ROM software, you'll be able to go online to explore the Internet at up to 33,600 bps as soon as you install it. Use this powerful communications tool from your home or office to tap into the vast resources of the Internet, send and receive E-mail and communicate via fax. Sportster Voice for Macintosh comes with voice, fax and data communications software, a power adapter, a Mac-to-modem cable, a seven-foot telephone cord, an Internet resource guidebook and documentation. The device is very reliable, widely compatible and is backed by a five-year warranty.

106131 SPORTSTER VOICE FOR MACINTOSH* \$199.95



ComShare 750

- Fully user programmable
- Designed especially for small offices

For the home office, the small office, or any environment where the number of telecommunication peripherals exceeds the number of available phone lines, the ComShare 750 represents an excellent money saving opportunity. By using this state-of-the-art telephone line sharing device, you'll be able to eliminate the need for expensive dedicated phone lines. ComShare 750 lets you use up to four devices on a single telephone line! Installation of the device is easy. Just plug ComShare 750 into any existing phone jack, connect the peripherals to the device, and you're fully operational. ComShare 750 provides RJ11 jacks for a telephone, a fax machine, a computer modem and a telephone answering device. When you have incoming calls, ComShare 750 detects the type of call and routes it to the proper connected peripheral – automatically. This line sharing device is compatible with most fax machines, computer modems and fax/modems, telephone answering devices and voice cards, credit card authorization terminals, call diverters, attendance systems, and virtually all other telecommunications peripheral devices.

101418 COMSHARE 750* \$119.95

Hold Your To-dos in the Palm of Your Hand



Voice Organizer™

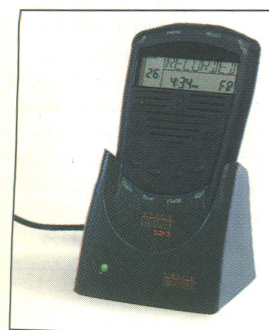
- Operates using simple voice commands
- Stores up to 99 memos, 99 reminders and 400 phone numbers

When you're away from your office, traveling, or any time you're in a position where your day organizer isn't available or convenient, the Voice Organizer fills in nicely. Use this sleek hand-held unit to audibly record appointments, memos, to-dos, and phone numbers, and selectively play back that information. The next time you run into a client away from the office, you'll be able to record a meeting date and time in Voice Organizer, and then play it back later for entry in your master calendar. If you're in your car and have that once-in-a-lifetime idea of how to make your millions, record your idea in Voice Organizer. It's a lot more convenient and safer than trying to write down your thoughts while driving. Voice Organizer is also a great phone book when you're on the road. It stores up to 400 contact numbers for up to 100 people, virtually eliminating your need to carry a bulky phone directory. Voice Organizer is powered by five rechargeable NiCad batteries which last five to seven days on a full charge and includes a battery charging stand.

105372 VOICE ORGANIZER*

*APS 30-day money-back guarantee not applicable. Product covered by manufacturer's warranty.

\$149.95



800-374-568



YoYo Phonebook				
First Name	Last Name	Nickname	Company	Work Telephone
Customer	Support		Big Island C.	(408) 542-0525
Sales			Big Island C.	(800) 788-7751
Support			Apple Comp.	(800) 555-APPL
4 items				

YoYo™ Telephone Manager



Now you don't need to be near your Mac or a Caller ID box to find out who's calling – YoYo Telephone Manager will automatically play a different sound effect on your Mac depending upon who it is, maybe a blood-curling scream when your mother-in-law calls or a romantic melody for your spouse or special friend.* YoYo hooks into your Mac PowerBook or Desktop Mac and has many useful features including a phone call log, a selective call blocking feature* that even works when your Mac is turned off, a phone book with automatic dialing and a paging feature that can page you when you miss an important phone call**. YoYo requires a Mac, Power Mac, or Power Book (except MacPlus, SE, Classic, and PowerBook 100) running system 7.01 or later, 2.5MB of hard drive space, and 8MB of total system RAM. YoYo is designed for use on analog phone lines only and is backed by a manufacturer's one-year limited warranty.

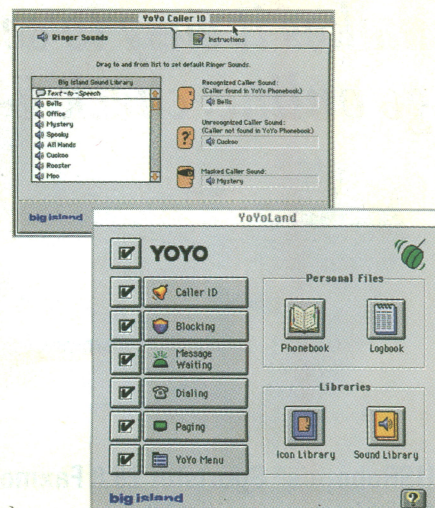
106592

YOYO TELEPHONE MANAGER

\$139.95

* Requires Caller ID service from your local telephone company.

** Requires paging service from a local or national paging company and Caller ID service.



TiNA™ Call Management System

Oh, the work you could accomplish if you could have someone to answer the phone and take messages. Now you can. Introducing the TiNA Call Management System. Using your telephone's number pad, you can quickly and easily program TiNA for a variety of telephone-related tasks, from a 220 name and number Caller ID* display to storing up to 25 minutes of voice messages among up to nine digital voice mailboxes. TiNA also stores up to six outgoing messages that you can easily program to activate automatically at certain times of the day. Some of TiNA's more advanced features include blocking calls to and from specific numbers, allowing only calls from a pre-defined list of VIPs, or selectively forwarding calls** originating from certain numbers. TiNA is backed by a two-year manufacturer's warranty.



CAT. #	ITEM DESCRIPTION	PRICE
106526	TINA - BLACK	\$199.95
106575	TINA - WHITE	199.95

* Requires Caller ID service from your local telephone company.

** Requires 3-way calling service from your local telephone company.

GRAND Vision® Mac Wizard

Totally flicker-free video output from your Mac has finally come of age. The GRAND Vision Mac Wizard is a new technology "frame converter" that gives you performance far superior to older computer video technology. Using this hardware-only solution, you can send broadcast quality stills and video from your Mac to any TV, television projector or VCR. It's perfect for presentations, video training sessions, sales meetings, and trade shows. The converter comes with two Mac video cables, one S-video cable, one composite video cable, a 9V AC/DC adapter, a small screw driver, and a user's guide, all in a handy, compact travel case.



105376

GRAND VISION MAC WIZARD

\$299.95



NoiseBuster Headset

Put on these NoiseBuster headphones, and you'll suddenly find yourself in the golden silence of a near complete elimination of background noise. The incessant buzz of fluorescent lights, the whirl of disk drives and the hum of monitors are gone! Even more amazing, you can still hear most non-background noise clearly. The way NoiseBuster works is conceptually quite simple. The unit samples the background noise in the environment. The sound pressure wave patterns are sensed and fed to a proprietary digital circuit which matches the frequency of the background noise (and low frequency vibration) with the sound of the same frequency, but with exact opposite wave form from the background noise, and plays this "anti-noise" back through the headset. The result is the elimination of the matched background noise. The headphones also allow you to play CD, radio or tape programs through the headset.

100483

NOISEBUSTER HEADSET

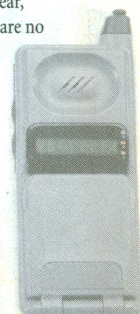
\$69.95

JABRA for Macintosh & JABRA Cellular

For hands-free communication, try JABRA. JABRA is a lightweight (the earpiece weighs only 1/2 ounce!) earpiece containing both a speaker and a microphone that provides clear, consistent audio input and output. JABRA for Macintosh plugs into either your Power Mac or your AV Quadra and turns it into a hands-free telephone workstation. Simply tell your contact manager, or the included DOC*TEL™ LITE to dial a client or associate, place the comfortable earpiece in your ear and you're ready to have a conversation, while keeping your hands free to type notes or thumb through files. If you've ever tried to use a cellular phone while driving, you know how difficult it can be. JABRA Cellular plugs into the 2.5mm stereo jack of many new cellular phones and eliminates the need to hold the phone up to your ear, allowing you to keep both hands on the wheel. With JABRA Cellular there are no expensive installation costs – simply plug it into your phone and you're ready to talk! You don't have to use JABRA Cellular only in the car – plug it into your cellular phone at the office.



CAT. #	ITEM DESCRIPTION	PRICE
106185	JABRA FOR MACINTOSH	\$139.95
106596	JABRA CELLULAR†	89.95



† Cellular phone not included

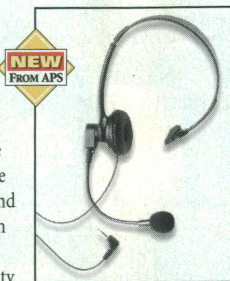
And Stay Connected



Telephones

Alpha Platinum 922cid

When you're in the middle of a meeting (or watching your favorite sitcom) you may want to know who's calling before you answer the phone. If you're using the new Alpha Platinum 922cid telephone from VTech and Caller ID service – available separately from your local telephone company – there's never a question. The Caller ID LCD readout on the phone's base displays the telephone number of incoming calls, along with a time and date stamp for the past 32 calls and the 900MHz cordless handset displays inbound and outbound telephone numbers on its LCD readout. The phone provides two line use with four programmable rings for each line, and a 20-number speed dial memory. The 900MHz digital cordless operation of the handset also offers superb clarity and range while the security of the digital voice encryption helps prevent electronic eavesdropping. The handset uses a rechargeable high-capacity NiCad battery which provides up to 5.5 hours of talk time or 120 hours of standby. Protected by a one-year manufacturer's warranty. 110V. For convenient hands-free communication, try the Alpha Platinum headset. It plugs into the built-in jack on the 922cid base unit and lets you flip through files or lookup information on the computer while you talk.



CAT. #	ITEM DESCRIPTION	PRICE
106586	ALPHA PLATINUM 922CID	\$299.95
106574	ALPHA PLATINUM 922CID WITH HEADSET	\$329.95
106585	HEADSET ONLY	19.95



Tropez

900 ITAD

One phone. Four users. No problem when you have the Tropez 900 ITAD. It's a 900MHz cordless telephone with an integrated digital voice mail center. The voice mail system has four programmable voice mailboxes for you and three other users to keep voice messages separate and private. The LCD displays the time and date of each message and gives you your message retrieval options. When you're away from the unit, you can call in to the message center and retrieve messages using a programmable access code. The cordless phone itself has terrific range, exceptional clarity, great battery life, and the security of digital voice encryption.



106031	TROPEZ 900 ITAD	\$299.95
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Tropez 900 NDX

With the ability to place calls from either the handset or the base unit, as well as intercom capabilities between the two units, this is one of the most functional phones on the market today. The 900MHz digital performance of the 900 NDX is incredible. It gives you crystal clear reception and outstanding range of use, and the built-in digital voice encryption protects you from electronic eavesdropping. The phone's handset and keypad have been redesigned for greater comfort and ease-of-use. Battery life has also been improved so you can use the handset even longer on each charge. 110V.



105044	TROPEZ 900 NDX	\$199.95
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Uniden® 900 with Answering Machine

Delivering high quality 900MHz digital cordless communication is only part of what the Uniden 900 with Answering Machine does. It also provides a digital answering system with computer chip technology that eliminates the need for tapes. Its 25 minute recording time provides plenty of recording time to store even your longest messages. When you're away from the unit, but want to check your messages, simply call the machine from any touch-tone phone and a voice guided menu will lead you through all of your answering machine's functions.



Uniden® Extend-A-Phone™ 9200 Cordless

This two-line 900MHz cordless phone is designed to provide you with up to seven times the range of normal 46/49 MHz cordless phones. Its advanced digital technology provides crisp, clear communication and prevents electronic eavesdropping. Dual keypads allow you to place calls from both the base and the handset. The Extend-A-Phone 9200 also allow you to conference yourself with other parties on Line 1 and Line 2, for 3-way conference calling.



106603	UNIDEN EXTEND-A-PHONE 9200 CORDLESS	\$349
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Take A Digital Camera On Vacation

Adobe PhotoDeluxe™ CD Free! with Casio Digital Cameras

PhotoDeluxe, with its easy-to-use interface, lets you unleash your creativity with digital photographs. PhotoDeluxe is based on the industry-standard image editing software for professionals, PhotoShop. Image editing that was once limited to professionals can now easily be done on your desktop! Customize your photos for that important business meeting or create a greeting card that includes images of family, friends and pets – or even a photo collage. Import the images into most word processing or desktop publishing programs and create professional looking newsletters, flyers, etc. Download your images to the Casio Digital Camera as part of your video slide presentation or to show at the next family gathering. Casio enables you to "Capture, Create and Communicate."

Adobe PhotoDeluxe includes:

- Over 25 built-in guided activities
- AfterDark® screen saver slide-show display
- Special effects from MetaTools™
- Adobe Acrobat® Reader
- Adobe Type Manager® software
- 12 Adobe Type 1 fonts



Olympus D-200L and D-300L Digital Cameras

The art and science of imaging

Today, many digital cameras offer either an optical viewfinder or an LCD screen. Olympus Digital Cameras offer the best of both worlds – an optical real image viewfinder with Parallax and backlight correction marks and a 1.8" TFT color LCD screen. Use the optical viewfinder just as you would on any camera, or find your shot on the LCD screen. If you want to make sure the shot you got was the shot you wanted, simply playback the image on the LCD screen. If it's not what you wanted, delete it and re-shoot. Both the D-200L and the D-300L feature four flash modes to help you achieve the perfect lighting – including one mode specifically designed to reduce the dreaded "red-eye" effect. An on-screen display lets you know your camera's settings and alerts you when you're running low on battery. Both the D-200L and D-300L feature an Olympus f2.8 high-resolution aspherical glass lens that greatly reduces field curvature for superior pictures. However, if your pictures don't turn out



exactly as you'd planned, simply download them onto your PC or Mac and use the included image manipulation software to enhance and retouch the photo, or to add and subtract color. The D-200L has a high-quality resolution of 640 x 480 pixels and will hold up to 80 standard quality pictures or 20 high quality pictures. The D-300L has a high-quality resolution of 1024 x 768 pixels and will hold up to 120 standard quality pictures or 30 high quality pictures. Order an Olympus D-200L or D-300L and let the world see what it's been missing.

CAT. #	ITEM DESCRIPTION	PRICE
106651	OLYMPUS D-200L DIGITAL CAMERA*	\$599.95
106652	OLYMPUS D-300L DIGITAL CAMERA*	899.95



Casio QV-100 plus Digital Camera



- Built-in 1.8" TFT, low glare, color LCD screen
- 4MB flash memory
- Built-in NTSC output (400 line VGA quality)
- Two-way communication with Mac or Windows PC

Adobe PhotoDeluxe software for Macintosh or Windows to modify your pictures. Create a presentation and send it back to the QV-10A or QV-100. Attach your camera to the video-in on a TV or monitor, with the included video cable, and show your presentation at your next business meeting or family gathering. It's a terrific tool for sales demonstrations.

The QV-100 includes Microsoft Internet Explorer which provides access to the World Wide Web. Think how you can use these images to promote your product or company.

CAT. #	ITEM DESCRIPTION	PRICE
106620	CASIO QV-100 PLUS DIGITAL CAMERA*	\$699.95
106364	CASIO QV-10A PLUS DIGITAL CAMERA*	499.95
106393	AC ADAPTER*	19.95

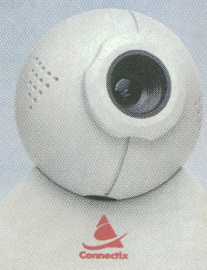


Casio QV-10A plus Digital Camera

- Color digital camera and presentation device in one
- 1.8" color TFT active matrix viewfinder
- Send images to a Mac or PC, view on a TV, or copy on a VCR

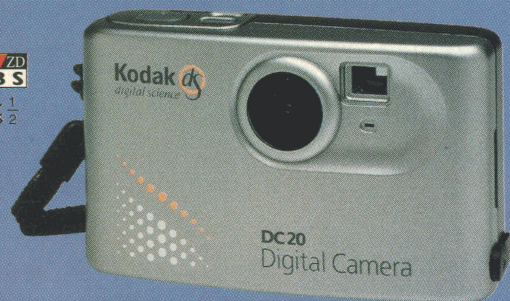
Connectix QuickCam & Color QuickCam

Quickly and easily capture digital still images and movies on your Mac using a Connectix QuickCam. The original QuickCam is a grayscale camera and the Color QuickCam is capable of stills in millions of colors at up to 640 x 480 resolution and video at 24 frames per second or better in thousands of colors at 160 x 120 pixels.



CAT. #	ITEM DESCRIPTION	PRICE
106360	CONNECTIX COLOR QUICKCAM*	\$229.95
105058	QUICKCAM *	99.95

And Have More Fun Than Ever Before!



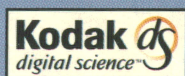
Kodak Digital Science™ DC20 Digital Camera Now with Netscape Navigator Gold 3.0

The affordable, new Kodak Digital Science DC20 Camera brings the cost of digital photography technology down to a level anyone can afford. Using this pocket-sized camera and the included software, you'll capture, download, and enhance color images without the added cost of film processing or the time requirements of scanning. Just point the fixed focus Kodak Digital Science DC20 at your subject and shoot. The camera holds up to 16 images at a standard 320 x 240 pixel resolution mode. It uses 24-bit color, providing a palette of millions of colors and is capable of image resolutions up to 493 x 373 pixels in the high-resolution mode. Captured images are easily downloaded to a Mac or PC systems. The Kodak Digital Science DC20 comes with one 3V lithium battery, a CD-ROM loaded with the acquire modules, and free software including PhotoEnhancer Special Fun Edition, Slides & Sound, and Kai's Power GOO.

106520

KODAK DC20 DIGITAL CAMERA*

\$199.95



Kodak DC25 Digital Camera Take pictures further

This fully featured camera offers you a fun, affordable way to capture great looking pictures for your Macintosh or Windows computer. Simply point the camera and take the picture. A built-in color LCD panel lets you review your

pictures as soon as you take them, allowing you to make sure you captured the moment just right. The Kodak DC25 Digital Camera has an image resolution of 493 x 373 pixels in high-resolution mode and 320 x 240 pixels in standard-resolution mode. The Kodak DC25 Digital Camera stores up to 14 high-resolution images or 29 standard-resolution images in stunning 24-bit color. A built-in flash has three modes-automatic, fill flash and off. The camera has a focus-free lens that has an autofocus range from approximately 29" to infinity and an aperture range from f/4 to f/11. The Kodak DC25 even comes with a CD-ROM full of software, including MetaTools Kai's PowerGoo™, so that once you get your pictures transferred to your computer, you can easily edit and morph them. The Kodak DC25 includes a manufacturer-backed one-year limited warranty.

106659

KODAK DC25 DIGITAL CAMERA*

\$489.95

DIGITAL CAMERA MODEL	CAT. #	MAXIMUM RESOLUTION	LENS FOCAL LENGTH	STORED IMAGES	WEIGHT	MAC/WIN	PRICE
Kodak DC20	106520	493 x 373	fixed focus - 47mm	16	4.2 oz.	Both	\$199.95
Casio QV-10A plus	106364	480 x 240	fixed focus - 50mm	96	6.7 oz.	Both	499.95
Kodak DC25	106659	493 x 373	focus free - 5 M to infinity	14/29	9.5 oz.	Both	489.95
Kodak DC40	105266	756 x 504	fixed focus - 44mm	48/144	16 oz.	Both	589.95
Olympus D-200L	106651	640 x 480	5mm - f2.8, aspherical = to a 36mm on a 35mm camera	80/20	11.9 oz.	Both	599.95
Casio QV-100 plus	106620	480 x 640	fixed focus - 40.5mm	62/192	3.2 oz.	Both	699.95
Kodak DC50	105388	756 x 504	3X zoom variable focus - 37mm to 111mm	7/11/22	22 oz.	Both	899.95
Olympus D-300L	106652	1024 x 768	5mm - f2.8, aspherical Autofocus = to a 36mm on a 35mm camera	120/30	11.9 oz.	Both	899.95

*APS 30-day money-back guarantee not applicable. Product covered by manufacturer's warranty.



Kodak DC50

Kodak DC40

Kodak Digital Science DC40 Camera & Kodak Digital Science DC50 Zoom Camera Bring the power of digital images to your desktop

With point-and-shoot simplicity and high-quality images, these digital cameras are the ideal solution for hundreds of business situations. Both the DC40 and the DC50 can help you easily create 24-bit color images for layouts, presentations, ID badges, real estate listings and many other applications. Both cameras feature 756 x 504 pixel resolution for impressive photo quality. Photographs can easily be downloaded from the camera to your Mac or PC. The Kodak DC40 gives you fully automatic picture taking with manual exposure and flash overrides so you can take great pictures in tricky lighting. The DC40 also has 4MB of memory so that you can store up to 48 high resolution pictures or 99 snapshot images. The DC50 comes with built-in 3x zoom and close-up capabilities to let you capture far-away and close-up images with detail that you can't get from a digital camera without the zoom and close-up capabilities. The DC50 also has an autofocus range from 29" to infinity and from 19" in close-up mode. Its aperture settings can be adjusted from f/2.5 to f/24 and shutter speeds from 1/16 to 1/500 of a second. The DC50 comes with 1MB of internal storage that can be upgraded with the purchase of an optional 4MB PCMCIA card.

CAT. #	ITEM DESCRIPTION	PRICE
105266	KODAK DC40 DIGITAL CAMERA*	\$589.95
105388	KODAK DC50 DIGITAL ZOOM CAMERA*	899.95
105391	4MB PCMCIA STORAGE CARD*	199.95

Jennifer



Woof,
anyway, unless my human invests in a metal detector, he'll never know about the data dump in his front yard. All our new machines will be these fast, economical, configurable M-POWER machines, so I'm in good shape until the next time they come out to locate the gas line in his front yard. Then I either have to do the "attack dog" thing or look for a new home...

Jennifer On...M-POWER
Ever the frugal hound, I was completely bowled over by the range of configuration options in my boss's new M-POWER computer line. Talk about "waste not, want not," - I think that should be our new advertising slogan! For years my human's had me order his computers, and when we bought those inconvenient configurations that always had stuff we didn't want or need, I intercepted the shipments and took out the extraneous stuff so he didn't know about it. This wiley canine has 300 MB and 500 MB hard disk drives, 4X CD ROM drives and 1MB RAM sticks buried all over my human's front yard - and, well, I had to do something with all that useless stuff, didn't I? It's no wonder he thought all those computers were over priced!

800 374-5681

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PD 650

105202 PD 650 Cart.
\$49.95 See page 32



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